REPORT

OF

THE I. C. A. R. ENQUIRY COMMITTEE

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
NEW DELHI
1973

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CHAPTER I

INTRODUCTION

1.1. On May 5, 1972, newspapers all over the country flashed the tragic news that a young agricultural scientist, Dr. V. H. Shah (b.17th October, 1932) who was working as a Senior Agronomist and Associate Project Coordinator in the Indian Agricultural Research Institute (I.A.R.I.), New Delhi, had committed suicide by hanging himself in his residence the previous night. Both Houses of Parliament were then in session. Members of Parliament naturally were deeply distressed and expressed grave concern at this unfortunate event; and that led to a debate in both the Houses. During the course of this debate, Members of Parliament regretfully referred to previous suicides committed by agricultural scientists. It was recalled by some Members that Dr. M. T. Joseph, Teaching Assistant, Division of Entomology, I.A.R.I. had committed suicide on January 5, 1960. Reference was also made to the suicide committed by Dr. S. S. Batra, Assistant Research Officer (Veterinary), National Dairy Research Institute, Bangalore, on March 28, 1970. Members complained that everything was not well on the campuses of the Agricultural Institutes and the Indian Council of Agricultural Research (I.C.A.R.) and they demanded that a high-power Committee should be appointed to make a comprehensive inquiry into the affairs and administration of the I.C.A.R.

1.2. Intervening in the debate, Mr. Fakhruddin Ali Ahmed, Minister for Food & Agriculture, joined the Members in their grave concern at the suicide by Dr. Shah and admitted that the Government of India was not happy with the procedure of selection in the I.C.A.R. "I wish to assure the Hon'ble Members", said the Minister in the Rajya Sabha on May 9, 1972, "that my Ministry and the Indian Council of Agricultural Research have not been too happy with the present system of recruitment which necessitates a scientist applying for posts and being interviewed by selection committees throughout his working career. This system inevitably provides frequent occasions for disappointment leading to frustration. This situation is dramatically illustrated by the plight of Dr. Shah who decided to take his life because of extreme anguish and mental torture." Having thus expressed his sentiments on the points made by Members of all sections in both the Houses, the Minister promised to appoint a high-power committee to examine the relevant questions.

1.3. In accordance with this assurance, the Union Government issued a notification on the 27th June, 1972, announcing their decision "to set up a High Level Committee under the Chairmanship of a retired Chief Justice of the Supreme Court and consisting of distinguished leaders of science and education as members to inquire into the recruitment policies of the Indian Council of Agricultural Research with effect from 1st July, 1972, for a period of about six months." The terms of reference prescribed for the inquiry by the Committee are as follows:—

(i) To examine the statements and incidents mentioned by Dr. Shah in the letter of May 5, 1972, addressed by him to the Director-General, Indian Council of Agricultural Research, New Delhi, before Dr. Shah committed suicide.

(ii) To review the recruitment and personnel policies of the Indian Council of Agricultural Research, Institutes and Centres working under it, and to suggest measures for their improvement.

(iii) To consider any other relevant matters which, in the opinion of the Committee, would help it to make effective recommendations.

1.4. It would be noticed that, in this notification, the names of persons composing the Inquiry Committee had not been mentioned; that was done by the notification issued on the 10th of July, 1972, which announced the composition of the Committee consisting of five members.

1.5. At the suggestion of the Chairman, the Minister for Food & Agriculture requested Dr. K. L. Shrimali, Vice-Chancellor of the Banaras Hindu University, to lend to the Committee the services of Prof. M. S. Kanungo, Professor of Zoology, to work as Member-Secretary of the Committee and the Vice-Chancellor was good enough to agree. Thereupon, Prof. M. S. Kanungo joined as Member-Secretary of the Committee on 24th July, 1972 and thus the Committee consisted of six members.

1. Shri P. B. Gajendragadkar, retired Chief Justice of India and Vice-Chancellor, University of Bombay; presently, Chairman, Law Commission. . . *Chairman*
2. Prof. D. S. Kothari, Chairman, University Grants Commission.. . . *Member*
3. Prof. B. D. Nag Chaudhuri, Scientific Adviser to the Ministry of Defence. *Member*
4. Shri H. N. Sethna, Chairman, Atomic Energy Commission, Trombay, Bombay . . . . . *Member*
5. Shri B. Venkatappiah, Chairman, Rural Electrification Corporation, New Delhi. . . . . *Member*
6. Prof. M. S. Kanungo, Department of Zoology, Banaras Hindu University *Member-Secretary*

1.6. The Minister accepted the request of the Chairman to make available to the Committee the services of Mr. K. K. Bhatnagar, Deputy Secretary in the Ministry of Agriculture, who had an academic background before he joined the I.A.S. He joined the Committee on the 24th July, 1972, as Deputy Secretary.

1.7. The first meeting of the Committee was held on 24th July, 1972. The Committee discussed broadly the scope and nature of its inquiry and recorded some relevant and material decisions. The Committee examined the letter written by Dr. Shah (Appendix I) and resolved that it should, by itself, consider allegations made in paragraphs (1) to (5) raised by Dr. Shah in his letter. For allegations made in paragraphs (6) & (7) of Dr. Shah's letter, the Committee's view was that the said allegations were concerned with technical matters and it would be desirable to appoint a Panel of Advisers to examine the allegations made by Dr. Shah in the said two paragraphs to assist the Committee by making their findings thereon. Amongst other decisions taken at this meeting, it was resolved that the Chairman should address a letter to the Director-General, I.C.A.R. personally requesting him to supply the information mentioned in the Resolution. It was also resolved to call for certain other information which would be relevant to the inquiry by the Committee, from the appropriate authorities. The questionnaire (Appendix II), which had already been drafted by the Member-Secretary, was discussed and revised, and it was decided that copies of the said Questionnaire should be circulated to all the members of the staff working at the ICAR and all its Institutes. The Chairman also requested the Minister of Food & Agriculture to get a circular issued to the officers of the I.C.A.R. and its institutes assuring them that they were at liberty to send their answers to the questionnaire directly to the Committee. A circular was accordingly issued by the Secretary (Agriculture) on 11-8-72 (Appendix III).

1.8. At the second meeting held on 19-8-70, it was resolved that a public advertisement should be inserted in important newspapers inviting the cooperation of all interested parties by sending in their answers to the questionnaire, copies of which, it was stated, would be supplied to them at their request. At the said meeting, the Committee also considered certain additional matters and resolved, *inter alia*, that the programme of the Committee's work, which had been circulated before the date of the meeting, should be approved and it was agreed that the inquiry by the Committee should be completed and the report finalised and submitted to the Union Government within the time specified in the first notification.

It was also resolved that, as a rule, oral evidence should be recorded only of such persons as would send in their answers in writing to the questionnaire issued by the Committee, and that the Chairman should record oral evidence at meetings, notice of which should be sent to all the Members of the Committee before hand, to enable them to join the Chairman, if they could, at the time of recording of the evidence. The procedure followed in recording oral evidence was that the Chairman and such of the Members who were present put questions to the witnesses and their answers were taken down by the Stenographers in the presence of the witnesses themselves. The total number of witnesses examined during the course of this inquiry is 187. These witnesses represented a fair cross-section of all categories of scientists working at the I.A.R.I. and some of the other Centres of the I.C.A.R. as well as eminent scientists not connected with I.C.A.R.

1.9. The Chairman had addressed personal letters to Members of Parliament who had taken part in the debate which took place in both the Houses soon after the news about Dr. Shah's death was published in the newspapers and some of the Members responded to the Chairman's appeal and appeared before the Committee and gave evidence (Appendix IV).

1.10. The response to the questionnaire issued by the Committee at first appeared to be somewhat halting and discouraging and complaints were heard that the copies of questionnaire were not made available to the scientists in time and they wanted the last date for submission of replies to be extended. Accordingly, the Committee extended the last date. Thereafter, answers to the questionnaire began to arrive in large numbers and in the end the total number of answers received was 2667. These answers have been classified and form part of Appendix V of this Report.

1.11. At the third meeting of the Committee held on September 16, 1972, it was resolved that a Panel of Advisers should be appointed consisting of the following persons:—

1. Dr. V. M. Dandekar, Director, Gokhale Institute of Politics & Economics, Poona. . . . . *Chairman*
2. Dr. L. S. Negi, Vice-Chancellor, Assam Agricultural University, Jorhat. *Member*
3. Dr. J. S. Patel, Chairman, Achievement Audit Committee, IARI, Pusa, New Delhi. . . . . *Member*
4. Dr. C. R. Rao, Director, Indian Statistical Institute, New Delhi . . . *Member*

The terms of reference for the Panel of Advisers were formulated in consultation with the Advisers (Appendix VI). The Advisers were requested to submit their report on or before the 15th of November, 1972. The Panel submitted its report on 20th November, 1972.

1.12. As decided by the Committee, two visits were paid to the IARI and informal discussions held with groups of scientists working at the campus of the I.A.R.I. Other Centres were visited by one or more Members of the Committee (Appendix VII). On the occasion of such visits to different centres, evidence was recorded by the Member/Members who visited the centres.

1.13. After the Committee began its work, the Secretariat of the Committee started receiving numerous complaints, memoranda and even telegrams alleging that irregularities had been committed in making several appointments in the past. Since the number of representations was very large, the question as to the manner in which these representation should be dealt with by the Committee was placed before the Committee, and the Committee decided that it was not within its terms of reference to examine individual complaints; nevertheless, it took the view that the representations received by the Committee may be scrutinised and relevant papers may be called for from the I.C.A.R. These along with 879 files already received from the I.C.A.R. containing proceedings of selection committees constituted by the

ICAR for recruitment to scientific and technical posts of Class I category, should be carefully examined to find out if they disclosed any general defects in the working of the existing system of recruitment. Where it appeared to the Committee that grave irregularities had been committed in respect of some of the appointments, the relevant cases were referred to the Director General for his comments and, after examining the comments received from him, the said cases were re-examined, and, if the Committee felt that there were some cases of grave irregularities which indicated an infirmity in the procedures prescribed for appointment by the ICAR after it came on the scene in 1966 or unfortunate departure from the rules prescribed in that behalf, notes were prepared illustratively for some of these cases and they have been placed in the Report as Appendix VIII.

1.14. During the course of the inquiry, it came to the notice of the Committee that notwithstanding the fact that the Union Government had appointed the Committee to examine, *inter alia*, the recruitment and personnel policies of the I.C.A.R, appointments continued to be made as usual and complaints were received from different scientists that it would not be fair that normal appointments should continue to be made when the policy of recruitment of scientists by the I.C.A.R. was under review by the Committee. The Committee considered these complaints and authorised the Chairman to move the Minister to stay all further appointments except those as appeared to the Ministry to be essential for the purpose of carrying on urgent scientific work. The Minister agreed with the suggestion made by the Chairman and we assume that it is only essential appointments that have been made pending the inquiry.

1.15. While the inquiry was proceeding, the Director General wrote a confidential letter to the Chairman accompanied by a note which indicated the thinking of the Ministry in regard to the structure of the I.C.A.R. The Committee considered the said communication and came to the conclusion that the status and structure of the I.C.A.R. fell within the terms of its reference and so, it authorised the Chairman to address a communication to the Minister requesting him not to process the proposal contained in the said note until the Committee made its report. The Minister was good enough to accede to the Committee's request.

1.16. After the work of recording of the evidence was concluded and the Committee began its deliberations, it was brought to the notice of the Chairman that the I.C.A.R. proposed to hold examinations for recruiting Assistants; and, thereupon, the Chairman requested the Minister to postpone the said examinations unless he thought it was essential to recruit Assistants even before the Committee made its report. The Minister was good enough to accept this request and we understand that the examination have been postponed.

1.17. In all, the Committee held 53 meetings. Out of these eight were for general discussions, thirteen for recording of evidence in I.C.A.R. institutes outside Delhi and thirty-two for recording of evidence at Delhi. Before the last 3 or 4 meetings were held, a draft was prepared setting forth pros and cons of the different problems on which the Committee had to form its opinion and in respect of which it had to make recommendations. This draft report was examined carefully and necessary changes were made in it. Finally, the Committee recorded approval to the summary of recommendations prepared by the Secretariat and the draft which was changed in the light of the discussions. At the time when the Committee approved of the revised draft and the summary of recommendations, some more suggestions were discussed and the formal recommendations were finalised.

1.18. Before we proceed to deal with the merits of the points referred to us by the terms of reference in the subsequent Chapters, it is our pleasant duty to place on record our appreciation for the cooperation and help received by us from Mr. Fakhruddin Ali Ahmed, Minister for Food & Agriculture. Our thanks are also due to Mr. T. P. Singh, who was the Secretary to the Department of Agriculture at the

relevant time and Mr. Q. M. Ahmed, Joint Secretary (Admn.) for having placed at the disposal of the Committee very promptly and without delay sufficient number of rooms suitably furnished. They also assisted the Committee by lending the services of the administrative staff and the Research Officers to meet the requirements of the Committee. The work of the staff associated with the Committee deserves to be appreciated, because, on several occasions, the Committee worked beyond office hours to suit the convenience either of the witnesses or the Members of the Committee and the time fixed for the completion of their assignment was rather rigid.

1.19. We ought also to express our gratitude to Dr. K. L. Shrimali, Vice-Chancellor of Banaras Hindu University for having accepted the request made to him by the Minister and the Chairman for sparing the services of Prof. Kanungo to join the Committee as its Member-Secretary on deputation. Dr. Kanungo has been of very great value to us during the course of inquiry.

1.20. The Committee is happy to record that Dr. M. S. Swaminathan, the Director-General has been consistently helpful to the Committee and has supplied to it all the information it wanted and offered constructive comments on the queries addressed to him. The Committee, therefore, feels that it is its duty to thanks the Director-General for his cooperative spirit

1.21. We are grateful to the Members of the Panel of Advisers for having accepted our invitation to assist us by examining the points referred to them. The Chairman of the Panel and his collegues completed their work and gave us their report with commendable speed.

1.22. The Committee is happy to place on record its appreciation of the assistance which it has received from Mr. Bhatnagar, the Deputy Secretary, whose services were lent to the Committee by the Ministry of Agriculture. His work has been of outstanding value to the Committee. It would be no exaggeration to say that, but for the cooperative and devoted effort of Mr. Bhatnagar, and his staff, the Committee would have found it difficult to conclude its labour within the time specified in the first notification.

1.23. It may be recalled that the first notification issued on the 27th June, 1972, which set forth the terms of reference and indicated the composition of the Committee, expressed the hope that the Committee would be able to finish its work within a period of about six months from the 1st July, 1972. However, the actual composition of the Committee was announced on the 10th July, 1972, and the Member-Secretary, Prof. Kanungo, and the Deputy Secretary, Mr. Bhatnagar, were able to join the Committee on the 24th July, 1972. That is why, it was on the 24th July that the Committee held its first meeting when its deliberations began. We feel happy that we have been able to make our Report earlier than six months from the 24th July, 1972.

1.24. We are conscious that the subject-matter of the inquiry is sensitive and the appointment of the Committee was announced when the atmosphere in both the Houses of Parliament and in the country was surcharged with emotion. We have attempted to approach the problems objectively and fairly and we venture to express the hope that the recommendations, which we have made, would be considered as forming part of an integrated scheme and would be implemented by the Government without delay.

CHAPTER II

SCOPE OF THE PRESENT INQUIRY—OUR APPROACH

2.1. We have already cited our terms of reference. Broadly stated, clauses 1 and 2 of the terms require that the Committee should examine the several statements and incidents mentioned by Dr. Shah in his letter of May 5, 1972, and review the recruitment and personnel policies of the I.C.A.R. and the Institutes and Centres working under it to suggest measures for their improvement. The third term of referencre is comprehensive and it enables and requires the Committee to consider other relevant matters which, in the opinion of the Committee, would help it to make effective recommendations.

2.2. Dr. Shah made several allegations expressing his distress and unhappiness over the state of affairs which prevailed on the campus of the I.A.R.I. We shall later have occasion to examine these statements. As we have already indicated, some of the statements will be examined by us in the light of the evidence adduced before us, while the allegations and statements made by Dr. Shah, which are of a scientific character, will be examined by us in the light of the report which the Panel of Advisers had made to us. The inquiry thus entrusted to us is broad and comprehensive in its character. Even so we are not called upon to consider any irregularities alleged to have been committed in making appointments after the ICAR took over from the U.P.S.C. recruitment of personnel in its Institute. It is clear that in examining matters specified in clauses 1 and 2 read with clause 3 of the terms of reference, some facts which do not directly fall within the problem of the recruitment and personnel policies, would never the less become relevant, because the recommendations we may make in regard to recruitment and personnel policies cannot be effectively implemented and would not fully serve the purpose unless those other matters, which are collateral in character, are also carefully examined. That is the reason why we have examined material isuses which appear to us to be relevant for the purpose of suggesting measures to improve the present recruitment and personnel policies of the I.C.A.R.

2.3. Before dealing with the specific issues which thus fall within our terms of reference, we think it necessary that we should make some general observations in relation to the impressions which we have formed at the end of the inquiry about the atmosphere on the campus of the I.A.R.I. and some other Institutes which some of us visited and about the administration of the I.C.A.R. and all its Institutes. These observations which we propose to make in this Chapter will indicate the approach which we have adopted in dealing with the problem with which we are concerned.

2.4. We would like to begin by recalling the statement on scientific policy of the Government, announced in Parliament by Jawaharlal Nehru 15 years ago :

> "Science has developed at an ever-increasing pace since the beginning of the century, so that the gap between the advanced and backward countries has widened more and more. It is only by adopting the most vigorous measures and by putting forward our utmost effort into the development of science that we can bridge the gap. It is an inherent obligation of a great country like India, with its traditions of scholarship and original thinking and its great cultural

heritage, to participate fully in the march of science which is probably mankind's greatest enterprise today."

and the statement continues :

"The Government of India have accordingly decided that the aims of their scientific policy will be :

(*i*) to foster, promote, and sustain, by all appropriate means, the cultivation of science, and scientific research in all its aspects—pure, applied, and educational;

(*ii*) to ensure an adequate supply, within the country of research scientists of the highest quality, and to recognise their work as an important component of the strength of the nation;

(*iii*) to encourage, and initiate, with all possible speed, programmes for the training of scientific and technical personnel, on a scale adequate to fulfil the country's needs in science and education, agriculture and industry, and defence;

(*iv*) to ensure that the creative talent of men and women is dissemination of knowledge, and for the discovery of new knowledge, in an atmosphere of academic freedom;

(*v*) to encourage individual initiative for the acquisition and dissemination of knowledge, and for the discovery of new knowledge, in an atmosphere of academic freedom ;

(*vi*) and, in general, to secure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge.

The Government of India have decided to pursue and accomplish these aims by offering good conditions of service to scientists and according them an honoured position, by associating scientists with the formulation of policies, and by taking such other measures as may be deemed necessary from time to time."

2.5. This is an inspiring statement, as relevant today as when it was enunciated. It emphasises the far-reaching value of scientific research for national development, the importance of a proper atmosphere conducive to research and application of research results and the need to ensure "good conditions of service to scientists". We have generally kept in mind the policy underlying the statement in formulating our proposals and recommendations.

2.6. In 1939, Lord Rutherford, in his Presidential address delivered on the occasion of the Silver Jubilee Session of the Indian Science Congress and the Joint meeting with the British Association for the Advancement of Science, pointed out that the annual production of wheat in India had increased in 25 years from 8.3 million tons to no more than 9.5 million tons. The exports in the same period had fallen from over a million tons to 10,000 tons. He said :

"In view of these facts, it would seem clear that in any national scheme of research, research on foodstuffs has a primary claim on India's attention. Quite apart from improvements in the system of agriculture used in India, there is a vast field for the application of scientific knowledge to the improvement of crops, for example, by seeking for improved strains suitable for local conditions, by research on fertilisers and in many other directions".

2.7. Agricultural education and research inevitably lead to extension operations. That is why, extension activities of agricultural research assume great significance in relation to the problem of agricultural improvement in our country. As the Education Commission has observed :

"The extension department should be skilled in translating the research results into instructional material and farming practice that can be made available to the staff of the primary extension

centre for transmission to the farmers. It will be of the highest importance for the success of these centres that the staff manning them have a practical knowledge superior to the farmers they are educating and that each centre receives the strongest support and guidance from the extension service of the agicultrual university."

2.8. It may sound platitudinous, but it is nevertheless true that agiiculture forms the backbone of Indian economy. For the successful execution of our Plans in relation to rapid and extensive industrialisation with a view to converting the Indian community into a modern society and changing the Indian economy into a prosperous economy which can offerample job opportunities to all citizens, agricultural improvement and increase in agiicultural production must supply the base. This was clearly realised by our Plan makers when the planning era began with the formulation of the First Five Year Plan on the 7th December, 1952. "In a country", says the First Plan document, "which is primarily agricultural and in which the pace of development in other sectors depends to a great extent on progress in agriculture, the system of ownership and management of land within which agricultural producers have to function is obviously of the highest significance."

2.9. In devising suitable measures for encouraging agricultural research, it must be borne in mind that :

> "the methodology of science admits of no rigid formula, for the mind of man—the most important, the most delicate, and most pliant, versatile and adaptable of all the instruments of scientific discovery—cannot be 'cabin'd, cribb'd, confin'd'. Discoveries may result from planned experiment and reason; from institution, imagination or hunch; from chance or erroneous observation; and all may play their part though in varying measure."*

2.10. In our Report, we are strongly recommending measures for decentralisation and democratisation of the academic and non-academic administration of the ICAR and its Institutes because we are satisfied that "Research is a creative and a fragile thing. It needs our constant and vigilant support. Research furnaces are not like steel furnaces. We can't bank them for a couple of years and expect to stoke them and get them burning promptly and vigorously as before."**

2.11. It is in the light of these broad principles that we proceed to ask ourselves what should be the kind of atmosphere on campuses where agricultural education is imparted and agricultural rasearch is carried on. In our view, on these campuses, it is absolutely essential that the atmosphere should be serene and conducive to a sustained and dedicated effort to pursue academic work. A genuine spirit of inquiry and search for truth must inspire every scientist on the campus. While engaged on search for truth, humility of approach must mark his effort and willingness to submit his views and his theories to a full and free debate and discussion with all his colleagues must never be absent. A free and full discussion is a condition precedent for any scientific progress, whether in agriculture or other branches of science and, in such a free and full discussion, dissent must always occupy a place of respect. Where research in one sub-discipline of agricultural science requires the cooperation of scholars in other sub-disciplines, such cooperation must be the order of the day. In other words, campuses, where education is imparted and research is conducted, must breathe the atmosphere of education and research and must inspire the scientists to carry on their work in a spirit of dedication.

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*Lord Cohen of Birkenhead, Nuffield Lecture, 1966 (1967 July ; Vol. 60, proceedings of Royal Society of Medicine p. 673—74).

**Observations made by Prof. Arthur Kornberg, Noble Prize Winner while accepting the American Medical Association's Scientific Award for 1968 (*Vide* Journal of American Medical Association, 29 July, 1968 p. 25).

2.12. For the development of science and its research, it is necessary that the institutes and centres must enjoy autonomy to carry on their work within the constraints reasonably implied in the very nature of their work. This concept of autonomy is not a legal concept, nor is it a concept based on considerations of prestige. It is, in a sense an academic and an ethical concept which postulates, that it is only under freedom from external pulls and pressures that education can be imparted and research conducted.

2.13. The concept of autonomy is not confined to the Institutes alone; it must permeate throughout the campus. All sections and divisions engaged in their respective assignments should, within the reasonable constraints of their respective assignments, be entitled to enjoy full freedom in the pursuit of their work.

2.14. The research atmosphere, on which we are laying considerable emphasis, would be totally inconsistent with a spirit of hierarchical structure of scientists as well as the wooden administrative or bureaucratic approach. All scientists whether junior or senior, must on principle, be regarded by the fraternity as equals engaged in the task which has been assigned to each one of them either individually or in groups. Bottlenecks created by administrative rules, which in one sense may be necessary, but the mechanical application of which can create considerable dissatisfaction in the mind of the scientists, must be effectively removed. Freedom to carry on experiments involves full liberty to reach one's conclusions which appear to the scientist to flow from his experiments and place them before his colleagues for debate and discussion. Inter-disciplinary co-operation and dialogue in modern times has become a necessity in the development of all sciences, and agricultural science, which is fast developing into several sub-disciplines can be no exception to this rule.

2.15. In one sense, agricultural science differs from other sciences in as much as its work is not confined merely to experiments in the laboratory, but it includes extension work and that involves testing and verifying the results of laboratory in fields in different regions. Thus extension work is a very significant part of the process of research in agricultural science.

2.16. It is also necessary to remember that scientists are human and, though they join the Institutes in a spirit of service to science, they do expect, and, indeed, are entitled to expect fair terms and conditions of service. They expect, and are entitled to expect reasonable facilities for carrying on their research, reasonable provision for accommodation and stay on or near about the campus, reasonable security of service subject to continued good work, reasonable participation in the work of the division or groups to which they belong, reasonable prospects of future promotion and improvement in case of good work tested from time to time by independent scientists, and should be free from necessity to appear before numerous selection committees just for the purpose of getting some promotion or other. Considerations of physical comfort and well-being are, in the context of today's continually rising cost of living, of great importance and, unless the parent institution takes care to see that absence of favourable physical conditions and absence of favourable terms of employment do not create in the mind of scientists a sense of disappointment, frustration or even anger, it would be futile to expect agricultural science to make that quick and stimulating progress which is so essential for the economic development of this country.

2.17. It is a fact that ever since ICAR assumed its present form and began to manage several Institutes affiliated to it in consequence of the Re-organisation Plan which was effected in 1946, our agricultural scientists, despite some serious difficulties and drawbacks, to which we refer later, have achieved a notable success in several major areas of agricultural research and development.

2.18. Green Revolution, of which we hear from time to time, is not a myth; it is a reality and the period between 1965 to 1969 has witnessed remarkable progress in agricultural development of this country, and, for this remarkable development, credit is undoubtedly due to our agricultural scientists who brought to bear upon their task a sense of devotion, sense of duty and scientific acumen

and knowledge. This task is yet incomplete and can *never be complete* in the very nature of things. Progress in science—and agricultural science is not an exception—is as ever-expanding concept and so, it is absolutely essential that the administration of the ICAR and its Institutes should be placed on such rational, sound and progressive basis that the objective of the ICAR and its Institutes should be more satisfactorily and more quickly achieved. On the progress that our agricultural science makes will depend the expansion of our agricultural wealth and the expansion of agricultural wealth will afford an enduring base for our industrial and economic growth. Faced as we are today with a serious crisis of food shortage and shortage of power and water, it is hardly necessary to emphasize what an important role agricultural scientists must play to help the country to face challenges caused by drought or excessive rains.

2.19. Having thus described generally what we regard should be the essential features of the atmosphere on the campus of the Institute and the Centre where agricultural education is imparted and agricultural research is conducted, let us briefly indicate the reality of the situation which has come to our notice as a result of our inspection on the spot and as a result of our inquiry in which both oral and written evidence has been produced before us. Our visits to the campus of the IARI and some of the Centres have created an impression in our mind that everything is not well on the campus of the IARI and the Centres which we visited. At the IARI, some of us met cross-sections of scientists, junior, mid-senior and senior, and we found to our regret that, in the mind of most of them, there was a sense of disappointment, dis-satisfaction, frustration and even fear. Some of them in fact told us that they would prefer to avoid sending answers to the Questionnaire supplied to them, because they were afraid that, if the answers which they gave came to the knowledge of the higher authorities, they might be victimised. As we have mentioned earlier, it was as a result of the impression thus formed by us that we moved the Food & Agriculture Minister to issue a circular giving an assurance to all the scientists that they were free to express their views in their answers to the Questionnaire.

2.20. It is not unlikely that the disappointment, frustration, anger and fear, which we noticed on our visits to the campus of the IARI, may not all be justified in every case. IARI has expanded very fast during the last five years and, with this fast expansion, opportunities of improvement of the scientists prospects have naturally increased. It is plain that, when opportunities for improvement increase with unexpected rapidity as a result of the large number of opportunities, the number of persons who are chosen at every interview would always be small, and the number of disappointed persons would be large. The fact that anger and frustration were expressed by many persons to whom we talked might be the result of such dis-appointment, has to be borne in mind in assessing the true position in regard to the administration of the IARI. But the general impression which we formed was that lack of satisfaction was expressed even by persons who had been selected for better posts and who had no ostensible cause to be dis-satisfied with the method of recruitment or promotion which at present prevails in the Institutes subordinate to the ICAR.

2.21. Another feature about the administration of these Institutes which has come to our notice, both as a result of the oral and documentary evidence, is that the administration has created an unduly large and in our opinion unnecessary hierarchy of officers and this hierarchy has naturally introduced an atmosphere which is not conducive to a sense of fraternity amongst the scientists who work on the campus. There is a head of a section or a division; then you have the Director of the Institute; and, at the Central Office, you have several Assistant Director-Generals, then there are Deputy Director-Generals, and at the apex of the organisation stands the Director-General. As a result of the constitution of the ICAR as a Society, it appears that under the relevant provisions of the Societies Act or by delegation from the President, too much power has been centered in the hands of Director-General and that, academically, is not desirable or sound.

2.22. Two comments may be made in respect of this hierarchical structure of the ICAR and its Institutes, and these comments are made not by reference to any particular individual or individuals, but by reference to the system of hierarchy itself. When a person becomes a head, whether of a section or a division or an institute, he is likely to be occupied mainly with administrative work and, to that extent, may lose touch with science; and, if he holds the post of the head permanently, it would not be surprising that he ends up by being a mere administrator and almost a stranger to science. This is a loss to science which must be avoided.

2.23. When a head is appointed for life, so much power vests in him, whether he is the head of a division or the Director of an Institute or one of the senior officers at the ICAR, that inadvertently, unwillingly or unknowingly he may not always use the power objectively or fairly. Sometimes, the head may form a good opinion about certain scientists and a bad opinion about certain others. Assuming that this opinion formed by the head is justified, the fact that the head will remain a head permanently is bound to create an unfavourable atmosphere for the scientists falling in the later category and it may not easily afford an opportunity to those scientists to better their prospects by improving their work. In such cases, humanly speaking, attitudes get hardened; and that creates a real problem.

2.24. Many witnesses have complained before us that the heads exercise their powers sometimes capriciously with the result that facilities and amenities are afforded to some scientists much better than to others; and the fact that the availability of facilities and amenities as well as the avenues of promotion substantially depend upon the decision of the head, does create an atmosphere of sycophancy or obstinacy. In either event, the atmosphere is not congenial to scientific work. Even in the matter of attending seminars or conferences either in India or outside, it is alleged that Heads do not act fairly and cases in fact have come to our notice when discrimination has been made.

2.25. It has been a general complaint before us that, whereas research is carried on by research assistants and the junior scientists, when the stage of publishing the results of such research is reached, it has been almost a recognised convention that the name of the head of the division has to be shown along with the actual researcher as being responsible for the result. Some young scientists bitterly complained that their research papers were not published, because they did not want the names of the head to be associated with the publication. We are free to confess that we have not attempted to verify every one of these complaints; that would have involved a much more comprehensive inquiry and, even then, it might have been difficult to find the truth. But one senior scientist (witness No. 32) told us that any one who compares the number of publications to the credit of a scientist before he is appointed the head, with the number of publications to his credit after he becomes the head, it would clearly appear that the complaint made by junior scientists cannot be dismissed as without any substance.

2.26. IARI has grown to such an extent that the Director may find it physically impossible to supervise the operations carried on in different divisions and to see that nothing happens in the working on the campus which gives a just cause for dis-satisfaction to the younger scientists. The existence of a permanent hierarchical structure, in our opinion is one of the major causes for the unfortunate atmosphere which pervades the campus of the IARI, and other Institutes. That is why we propose to recommend that all positions of power, for which there is scramble amongst scientists because they enjoy administrative prestige, should be made tenure posts. Fortunately, on this issue, as we will later point out, there has been a fair amount of agreement amongst the scientists who appeared before us.

2.27. In regard to the headquarters of the ICAR itself, this principle of tenure posts must be applied. In this issue, the Director-General generally agreed and added that he would prefer to work as a scientist rather than act permanently as a Director-General and that he was in favour of making all posts tenure posts. After the ICAR was re-organized, a number of D.D.Gs. and A.D.Gs. have been appointed and

several persons have complained that the creation of so many posts at the headquarters of the ICAR has followed the proverbial Parkinson's Law. We are not prepared to say that this criticism is entirely without any basis.

2.28. Another factor, which has weighed in our mind in coming to our final conclusions, is that the whole administration needs to be democratised and decentralised. As our report will show, we are recommending the establishment of an Advisory Council and two Executive Committees, and one of our recommendations is that once the Advisory Council has made its recommendations and the two Executive Committees which we contemplate have made allotments and given general guidelines and directions, those in charge of the actual work of education or research or extension should be given full powers to carry on their work uninterrupted by outside pulls and pressures, subject, of course to the constraints which reasonably flow from the very nature of the assignment entrusted to the scientists-concerned. Besides, while proposing that all posts of heads should be made tenure posts, we are also recommending that the heads should be required to administer their divisions or the Institutes and even the ICAR in consultation with committees constituted on the lines which we will indicate later on.

2.29. There is one more point to which we will refer in this Chapter where we are broadly indicating our approach. We are aware that some of the points, which we are making in this Chapter, will have to be repeated when we deal with the problems individually; but we thought it necessary that in order that our recommendations should be properly appreciated it is desirable that, in this Chapter, we should indicate our approach and illustrate it by indicating some recommendations which we propose to make.

2.30. In 1966, when the ICAR was re-organised, the recruitment of scientists was withdrawn from the UPSC and it was entrusted to the ICAR. It appears that certain rules have been framed by the ICAR as to the formation of the selection committees and the procedure to be-followed in making appointments. The system evolved by the ICAR may perhaps not be open to very serious objections, but some of the grounds, on which the recruitment was withdrawn from the UPSC and entrusted to the ICAR, do not appear to us to be sound as we will indicate later. We are aware that, in some scientific bodies, such as Bhabha Atomic Research Centre, recruitment is done not by the UPSC, but by the Centre itself. But, in the present circumstances where a crisis of character and confidence seems to have overtaken the entire administration of the ICAR, we think it is absolutely necessary that recruitment of personnel in all the Institutes with the ICAR should revert to the UPSC. The position may be reviewed after five years but we feel convinced that in the present context to continue the existing system any more would seriously undermine the efficiency and morale of the organisation.

2.31. We wish to make it clear that we are making this recommendation, because we are satisfied that there is obvious dis-satisfaction with the recruitments made from 1966 onwards. It is quite possible that this dis-satisfaction which was expressed by several witnesses who appeared before us and which is supported by overwhelmingly large number of answers received by us may not, on the merits, be fully justified. But the fact that there is such an amount of dis-satisfaction is a reality and it would, we think, be idle to ignore this reality. On this issue, the Director-General was fair enough to say that it would be better if, for some time, the recruitment is entrusted to an independent outside agency.

2.32. We wish, however, to make it clear that, in making this proposal, we are not casting any aspersions on any individual in the ICAR administration; but all the same we cannot disguise from ourselves the fact that the present position in the ICAR is unsatisfactory and calls for a radical remedy. It would thus be clear that this recommendation would have no relevance to the other scientific bodies where recruitment is done by those bodies themselves.

2.33. Thus, our approach in dealing with the problem entrusted to us is to make recommendations which would improve the present recruitment and personnel policies and help to create a healthy atmosphere on the campus of the IARI and other Institutes, so that these Institutes and the scientists working in them should play their legitimate role of assisting the growth of agricultural science and the development of agricultural production in this country.

2.34. Before we conclude this Chapter, we would like to add with a sense of satisfaction that, during the course of our inquiry, we found that in spite of disappointment, frustration and even anger which pervade their minds, almost all the scientists, whom we met, struck us as highly qualified and competent in their respective disciplines and determined to serve the country by making their contribution to its agricultural development, by their experiments and extension work in the respective disciplines of their choice.

CHAPTER III

STRUCTURE AND STATUS OF ICAR—BEFORE AND AFTER 1966

3.1. As a result of the constitutional changes of 1919, the Government of India transferred all powers of superintendence, direction and control over the administration of agricultural and veterinary subjects to the State Governments. Provincial Governments were thus given the primary responsibility of development of agriculture and research in agriculture. Need was then felt of a Central organisation which could guide and co-ordinate the policies of the Provincial Governments at the Central level. A Royal Commission on Agriculture was, therefore, appointed in 1926 to inquire into the agricultural set-up and the rural economy of the country and to make recommendations to consider filling up of this gap at the Central level.

3.2. The Commission recommended the establishment of an Imperial Council of Agricultural Research under an Act of the Imperial Legislature, to which the Central Agricultural Research Institutions and the provincial research institutions would stand in exactly the same relation. The Commission felt that it was the duty of the Government of India to bear the ultimate responsibility for the welfare of the vast rural population of the country by advancing research in every possible way. They held that agricultural research in the country was still in its infancy and there was a wide scope for the co-operation of the Government of India and the Provincial Governments in this regard.

The Government of India considered the recommendations of the Royal Commission, and decided to set up the Imperial Council of Agricultural Research as a Society registered under the Societies Registration Act, 1860 (Act XXI of 1860). Therefore, the Council came into existence as a Registered Society on July 16, 1929.

3.3. The working of the ICAR has since been subjected to scrutiny by several committees and teams, but it retained its original basic structure till the re-organisation in 1966. Certain important changes were, of course, made in the meanwhile regarding the Headquarters office of the ICAR. In 1930, the Government of India (*vide* its Resolution No. 1619-Agri. dated 4-8-30) decided that the ICAR should work as an Attached Department of the Government of India. By a subsequent Resolution dated 5th January, 1939, the Government of India decided that with effect from 15-1-39, the Secretariat of the Council should no longer be a Department of the Government of India. This decision was taken to place the Council more firmly in the position which the Royal Commission had envisaged and to enable it to carry out effectively its primary functions after relieving it of all unnecessary routine procedures and rules. It was, nevertheless, continued as an Attached Office of the Government of India. Consequent upon Independence of the country, it came to be described as the Indian Council of Agricultural Research on 10th June, 1947.

3.4. The First Indo-American Team to look into the organisation and functions of the ICAR was set up by the Government on 24th November, 1954. The Team had the Vice-President of the ICAR as the Chairman, 3 agricultural experts from India and 3 American experts.

3.5. The Team made a large number of recommendations on research, higher education, administration and personnel management. Some of the important recommendations of the Team which have

a direct bearing on the present inquiry are reproduced below:

(*i*) The funds of the ICAR should be utilised to initiate work in fields that are not receiving attention or to strengthen research in fields where current support is inadequate.

(*ii*) Administration and control of the grant funds by the Central Government should be limited to (1) the maintenance of a record of projects to which these funds are assigned by the States, (2) a brief report to be submitted by the States annually summarising use of the funds and progress of the research, and (3) an annual field review by selected staff members of the ICAR to observe the work in the field and discuss the research work with the appropriate State officials.

(*iii*) The States should develop adequate research facilities to permit their participation in schemes of regional or national significance wherein personnel employed by the ICAR could be located in the problem areas where research is to be conducted.

(*iv*) The development of national or regional centres should be limited to those problem fields and to areas of work in which Centrally supported institutions can function more effectively than individual State research institutions in providing research or testing services required by a number of States. The Central Institutes should not normally establish branch stations to ensure maximum Centre-State co-ordination of research.

3.6. The Second Indo-American Team was set up on 12-9-59 in the context of formulation of the proposals for the Third Five Year Plan in the field of agricultural education, research and extension. The Team was headed by the Vice-President of the ICAR and had on it 7 experts on agriculture from within the country and 4 American experts.

3.7. The important recommendations of the Team, which have a direct bearing on the terms of reference of the Committee, are reproduced below:

(*i*) The overall agricultural research programme in India should be substantially enlarged in specialities and facilities to cope with India's enormous problem of increased agricultural production.

(*ii*) Major problems should determine India's agricultural research policy. To identify these problems, to establish priorities, and to determine means of implementing a research programme geared to solve these problems, and Agricultural Research Policy Council should be formed. This Council should be comprised of high level agricultural technical officers and serve as a standing advisory committee to the Governing Body of the Indian Council of Agricultural Research. With the establishment of this high level body the Board of Research should be abolished.

(*iii*) Co-ordination of all agricultural research programmes should be strengthened. It is recommended that the Indian Council of Agricultural Research, founded as the co-ordinating body, should effectively assume this role. Necessary organisational changes should be adopted some of which are listed below.

(*iv*) It is recommended that all the Central Research Institutes be brought under the full technical and administrative control of the ICAR.

(*v*) It is recommended that all the Commodity Committees including the Central Sugarcane Committee be brought under the full technical and administrative control of the ICAR.

(*vi*) The Indian Council of Agricultural Research should sponsor only major projects of regional or national significance and cross-commodity research projects. Local research should be the responsibility of the States.

3.8. In 1963, another Expert Committee called the 'Agricultural Research Review Team' was appointed to inquire into the existing research set up in India. This was headed by an American scientist and it had 3 Indian and 3 foreign experts.

3.9. The Committee made an extensive tour of the country including visits to a number of research institutes, commodity committee, agricultural universities, State Agricultural and Veterinary Colleges, etc. The Committee made the following important recommendations, which have a direct bearing on the terms of reference of this Committee:

(*i*) The Indian Council of Agricultural Research which has insufficient authority should be abolished and replaced by a new Council for Agricultural and Food Research with all necessary powers to develop and administer a national programme commensurate with the country's need. This new Council should assume full technical and administrative control of all Central Agricultural Research Institutes, all Commodity Committees and certain other research, organisations now financed by the Government of India through various channels. The Research Review Team proposed that related institutions like the Central Food Technological Research Institute should also be brought under the ICAR. The Review Team also felt that the re-organised Council should be incharge of extension activities in the country.

(*ii*) The Council should be authorised to make block grants for the strengthening of research organisations in the States and to take other measures for co-ordinating efforts between the States and the Centre.

(*iii*) It is essential that the Council for Agricultural and Food Research should have adequate scientific staff to ensure that decisions on scientific questions are made by scientists. The staff structure suggested is outlined in the body of the Report.

(*iv*) The Indian Agricultural Research Institute, the National Dairy Research Institute, the Indian Veterinary Research Institute should be designated as National Institutes and given greater autonomy in functioning.

3.10. The recommendations of this Committee were examined by the Government and several important proposals were submitted to the Cabinet for their approval in March, 1965. The Cabinet, in its meeting held on 27th March, 1965, approved of the following proposals :

(*i*) the re-organisation of the Indian Council of Agricultural Research by bringing under it all Research institutions under the control of the Ministry of Food and Agriculture;

(*ii*) the re-constitution of the Governing Body of the ICAR by making it pre-eminently a body of scientists and those with interest or knowledge in agriculture;

(*iii*) financial assistance for research to State research institutes and other research institutions such as Universities being given in the form of block grants on the model of the Atomic Energy Commission;

(*iv*) agreeing in principle to the Indian Agricultural Research Institute, New Delhi, Indian Veterinary Research Institute, Izatnagar (U.P.) and National Dairy Research Institute, Karnal (Punjab) being designated as National Institutes and taking up the necessary legislation therefor;

(*v*) the adoption of personnel policies as indicated in Para 14, particularly with reference to the exclusion of Class I and Class II posts in the ICAR and in the Institutes under it from the jurisdiction of the Union Public Service Commission;

(*vi*) the formation of a Cabinet Committee for Agricultural Research; and

(*vii*) agreeing in principle to the appointment of two officers on Special Duty, the case being processed separately through the Ministries of Finance and Home Affairs as required under the Transaction of Business Rules.

3.11. In the reorganised Council, the ICAR Society is the parent body consisting of a large number of members (180) representing various interests in the country. The authorities and officers of the Society, as indicated in its Rules, are the following :

(*i*) Governing Body.

(*ii*) Standing Finance Committee.

(*iii*) Advisory Board.

(*iv*) Standing Committees.

(*v*) President of the Society.

(*vi*) Director-General.

(*vii*) Secretary, and.

(*viii*) Such other authorities/officers as may be constituted/appointed as such by the Governing Body under/or the Government of India.

3.12. A brief description of the powers and functions of the President of the ICAR, and its principal functionaries is indicated below :

President of the ICAR

The Minister in charge of Agriculture is the President of the Society, and he exercises such powers as may be delegated to him by the Governing Body. He also has powers to :

(*a*) review periodically the work and progress of the society;

(*b*) appoint committees to conduct inquiries into and report on the affairs of the Society, and

(*c*) pass orders on the recommendations of such reviewing and inquiry committees.

The President can delegate his powers to the Director-General or the Secretary. He is the appointing authority for posts having pay scales of Rs. 1600 and above and he also nominates Chairman for selection committees having pay scales of Rs. 700-1300 and external experts for selections to posts having grades of Rs. 1600 and above.

Functions and Powers of the Director-General

3.13. The Director-General who, according to the Rules, shall be a distinguished scientist, is the Vice-President and the principal executive officer of the Society. He is responsible for the proper administration of the affairs and funds of the Society under the direction and guidance of the Governing Body. He can also be vested with such executive and administrative powers of the Society as may be necessary or incidental for the purpose of the Society. Subject to the Rules and Bye-laws and Regulations of the Standing Finance Committee, he has powers similar to those vested in a Secretary to the Government of India. His powers and functions can broadly be categorised under the following heads :

(*i*) *Administrative Powers.*—He has to exercise general supervision and disciplinary control over the officers and the staff of the Society. He is the appointing authority for all Class I posts in the pay scale of Rs. 700-1300. He also nominates external experts for selection committees in the Junior Class I (Rs. 400-900), Senior Class I and the top posts of the ICAR having pay scales of Rs. 1300 and above.

(*ii*) *Technical Functions.*—He co-ordinates and exercises general supervision over all the agricultural and animal husbandry researches and other activities of the Ministry. He has power of sanctioning schemes costing upto Rs. 10,000.

(*iii*) *Advisory Functions.*—He advises the Government of India, State Governments and the Union Territories on all matters connected with agriculture and animal husbandry referred to him.

Functions and Powers of the Secretary

3.14. The Secretary is considered as the principal secretary of the Society and the functions of the Society are discharged in his name. He looks after the Society under the direction of the President, and it is his responsibility to keep proper records of the minutes and proceedings of the various statutory bodies under the Society. He would also discharge such other functions as may be delegated to him by the Governing Body. He has been given the powers and functions of Head of the Department in relation to the staff of the ICAR secretariat.

Powers and Functions of the Deputy Director-Generals and Assistant Director-Generals

3.15. The Research Review Team, set up in 1963, recommended the creation of posts of a number of specialist advisers in the secretariat to assist the Director-General. As on date, there are 4 Deputy Director-Generals and 13 Assistant Director-Generals. The following functions are being discharged by these officers, as intimated by the ICAR :—

3.16. **Deputy Director-General**

(*i*) To formulate and supervise Council's policies and work relating to his division.

(*ii*) To assist the Director-General and other officers of the Council.

3.17. **Assistant Director-General**

(*i*) Formulation of research schemes, including all-India Co-ordinated Projects relating to his discipline.

(*ii*) To assist and advise the Deputy Director-General in all matters relating to their fields of specialisation.

(*iii*) To act as Technical Secretary of Scientific Panels, Review Teams and other *ad hoc* committees which may be formed from time to time and in respect of which duties may be allocated to him.

(*iv*) To do any other duty as allocated to him by the Director-General or the Deputy Director-General.

The D.D.Gs. have also been given powers to sanction tours by their subordinate staff and to sanction T.A. advance to them. In practice, all technical problems and matters are referred by the Directors to the D.D.Gs. for their examination, including various schemes. In the procedure for recruitment, they have been playing a limited role in approving the screening statement for calling candidates for interview and in representing the ICAR on selection committees.

Powers and Functions of Directors

3.18. Except for the Director of the IARI, which has been given the status of a University under section 3 of U.G.C. Act of 1956, all the rest of the Directors are placed on the same footing. In the IARI, where training is being imparted at the M.Sc. and Ph.D. level, the Director, IARI, discharges the duties of Vice-Chancellor with reference to the educational programme of the Institute. In addition,

he is to guide, promote and supervise the programme of extension, education and research. Apart from this, his powers in all the other spheres appear to be the same as that of the other Directors.

3.19. A Director of the Institute has all executive responsibilities for conducting the affairs of his Institute. However, for the purposes of sanctioning new schemes, he has to approach the ICAR and hence his power of incurring expenditure is limited to the provision made for specific schemes in the annual budget. He is also the appointing authority for posts in Junior Class I category (Rs. 400-950). He is also the appointing authority for all the other scientific, technical and administrative posts below this grade. However, experts for Junior Class I posts are nominated by the Director-General and for the Class III posts he has to call for names from the Employment Exchange.

3.20. There does not appear to be any regular committee functioning in the various institutes to guide their work nor are any sub-committees reported to be functioning where the affairs of the institutes can be usefully discussed. In other words, for all practical purposes, organisation and working of the institutes of the ICAR is like any other Government office.

3.21. The Cabinet, while approving of the proposals for the reorganisation of the ICAR, had approved in principle that the Indian Agricultural Research Institute, New Delhi, Indian Veterinary Research Institute, Izatnagar and National Dairy Research Institute, Karnal, should be designated as National Institutes and necessary legislation should be undertaken for this purpose. The gist of the proposal then submitted to the Cabinet was that these institutes will be granted substantial degree of autonomy, similar to that enjoyed by the Tata Institute of Fundamental Research. Each Institute will have a separate Governing Council and after approval of their annual budget by the Governing Body of the ICAR, the power for sanctioning of further schemes and staff would be exercised by the respective Governing Bodies. The proposals also envisaged increased delegation of powers to the other research institutes to be taken over by the ICAR.

3.22. We have been informed that before legislation for this purpose could be finalised, some rethinking became necessary because of reluctance on the part of the Government employees of the central institutes to resign from Government service and opt for the services of the ICAR. Before severing their connection from the Government they wanted security of service and tenure and some statutory protection of the rights and benefits being enjoyed by them as Government servants. ICAR being a Registered Society, it could not provide any such statutory guarantees. At this stage it was also felt that when the ICAR itself was not a statutory body, conferring statutory status on the 3 National Institutes and then placing them under the control of the ICAR, may be anamolous. After deliberation, it was finally decided that it would be necessary to grant a statutory status to the ICAR itself by appropriate legislation. This piece of legislation, it was decided, should contain sufficient provision for providing necessary safeguards and guarantees to the Government employees of the Central institutes, before their services were placed at the disposal of the ICAR. It was also decided that in such a situation, it would not be necessary to bring separate legislation for converting these 3 institutes as National Institutes.

3.23. The Cabinet approved of the proposals for undertaking legislation for converting ICAR into a statutory body on 30th June, 1970. We have been informed that the proposed bill has not yet been finalised.

3.24. The Director-General, ICAR informed the Committee on 27th September, 1972, about the current thinking in the Ministry of Agriculture in regard to the future organisation of agricultural research. He enclosed for the information of the Committee a note outlining this thinking. The Director-General intimated that the ideas contained in this note had been developed before the appointment of

this Committee and though they reflected the views of the Ministers in the Ministry of Agriculture, the proposals had yet to be discussed with the other concerned Ministries. He stated that further consideration was being given to the composition of the proposed research commission. The proposals contained in the note are mainly : (1) constitution of an Agricultural Research Commission; (2) organisation of the present ICAR secretariat into a regular Department of Agricultural Research, and (3) continuation of the present method of recruitment with such changes as might be suggested by this Committee. The note envisages freedom to the Commission for formulating its own procedures for purchases and construction of buildings. Other important proposals were : adoption of rules and procedures in service matters of the Department of Atomic Energy, constitution of an Agricultural Research Service and functional autonomy for constituent research units under the ICAR. Our comments on this proposal find mention in a subsequent Chapter of the Report.

3.25. Agricultural research till 1966 was mostly carried out in the Central institutes such as IARI, IVRI, NDRI, etc. through the Central Commodity Committees, through State Departments of Agriculture and Animal Husbandry and through the limited research schemes of the ICAR. There were several institutes under the Central Government and 8 Central Commodity Committees for different cash crops, *viz.* cotton, sugarcane, tobacco, jute, oilseeds, coconut, lac and arecanut. The aims and objectives of the ICAR being to undertake, aid, promote and co-ordinate agricultural and animal husbandry education and research, it was discharging this function through financing a large number of research projects, by aiding research work carried out in Government institutes at the Centre and the States, in Universities, and also in recognised private institutions. The Indo-American Teams recognised that in spite of severe financial and organisational restraints under which the ICAR was working, it had significantly contributed to the support and integration of Agricultural research in India.

3.26. The reorganisation of the ICAR w.e.f. 1-4-66 was a landmark in the history of development of agricultural research in the country. The reorganisation came in the wake of widespread draught situation prevailing in the country and it is to the credit of the ICAR that immediately after its reorganisation, it plunged itself into the task of improving agricultural research in the country. The reorganisation was intended to provide the much needed spurt through the coordinating efforts and financial resources of a central body for agricultural research and education in the country. At this stage, some agricultural universities notably the agricultural universities in Punjab and Pantnagar had come into existence, but they had yet to establish their research programmes on a sound footing. It was felt that to provide a definite direction to agricultural research and education and to implement various measures needed for this important national task, it was necessary to have a strong central organisation. This organisation with its technical and financial resources could be able to lead agricultural research in the proper direction. To achieve this objective, it was necessary to make all efforts at research under the ICAR and these measures were implemented in right earnest. The Government also gave powers to the ICAR to make its own recruitment and strengthen the Council by appointment of a number of technical and administrative personnel.

This broadly stated is the position of the structure and status of the ICAR before and after 1966.

CHAPTER IV

PRESENT SYSTEM OF APPOINTMENTS IN RETROSPECT

4.1. The Revised Bye-laws of the Council containing recruitment rules for different categories of staff were passed by the Governing Body of the Council in their meeting held on 23-9-65. Recruitment in accordance with these rules was made immediately after reorganisation and the first posts to be filled up were the newly created top posts of Deputy Director-Generals, Assistant Director-Generals and some Directors of the Institutes. The Council also issued instructions in May, 1967, prescribing model qualifications for posts in various grades.

4.2. The bye-laws of the ICAR have grouped its officers and staff in the following categories :—

(*i*) Scientific
(*ii*) Auxiliary technical
(*iii*) Administrative, ministerial and accounts
(*iv*) Subordinate staff.

The Bye-laws contain separate provisions for constitution of selection committees and procedure of recruitment for each of the above categories. For the scientific and technical posts the Bye-laws contain following proposals :—

Recruitment to categories (i) and (ii)

4.3. Pay range	Appointing authority	Chairman	Outside experts	Departmental representatives
1. Rs. 1600 and above	President, ICAR	DG, ICAR	(*a*) 2 or 3 to be nominated by President, ICAR (*b*) 1 or 2 to be co-opted by Chairman in consultation with members of selection committee.	1
2. Rs. 700-1600	DG, ICAR	To be nominated by the President.	Not exceeding 2 to be nominated by DG.	3
3. Rs. 400-1000	DG, ICAR/ Director of the Institute concerned.	To be nominated by DG.	Not exceeding 2 to be nominated by DG.	3
4. Scientific and technical equivalent to Class II/III	Director of the Institute Secretary, ICAR.	Director or Head of Division or person nominated by DG, in case of its secretariat.	1 or 2 nominated by DG.	1 or 2

Recruitment to categories (iii) & (iv)

Category (iii)—Administrative, ministerial and accounts:

4.4. Recruitment, appointments, promotions and transfers to posts included in this category shall be made in accordance with such rules and orders as may be made by the President, which will, as far as practicable, be similar to rules in force for corresponding posts under the Central Government.

Category (iv)—Subordinate staff:

4.5. Appointments to posts included in this category may be made by local advertisement by inviting nominations from Employment Exchange and other similar organisations and on the recommendations of a selection committee to be constituted by the appointing authority.

4.6. The selections made by the ICAR since its reorganisation have been the subject-matter of criticism not only in regard to individual selections, but also in regard to the general features of the methods of recruitment. As a result of the severing of connections with the UPSC whose selections are to a large extent insulated from political pressures due to its constitutional status, the new system in the ICAR was from the very beginning subjected to various types of strains and pressures. The formal association of the Minister as the President of the ICAR also was likely to expose the system to political pressures. We have noticed instances in which rejected candidates, even before formal announcement of the results of the selection approached Members of Parliament and other V.I.Ps., gave them hand-written notes and these were sent to the Minister by the V.I.Ps. for action. We also have come across cases in which the selected candidate, after having come to know about all these counter-pressures, being exercised by rejected candidates, himself went to another M.P. or V.I.P. and got a letter written in his favour to the Minister. The system of open selections for all the posts, had the effect of generating hopes in the minds of large number of scientists who competed for each post, and since most of them were naturally rejected, a sense of dissatisfaction and frustration came to be built up against the system. This was further aggravated due to a large number of grades. We have come across cases in which there have been claims and counter-claims by, and against, the same set of individuals. We have also received allegations about the experts being influenced in favour of certain candidates, and looking to the overall environment in the country, we would not be surprised if individual considerations might have found a place in many selections.

4.7. The Minister of Agriculture, Mr. Jagjivan Ram, expressed his dissatisfaction with the operation of the system in the following minutes recorded by him on 27-5-67 :—

> "Complaints have been voiced that candidates not belonging to the organisation, even if they possess the requisite qualifications, are not even called for interview. This should be avoided."

4.8. In May, 1968, Mr. Jagjivan Ram, in consultation with the Director-General, ICAR took a decision that for selection committees for the posts in the grade of Rs. 700-1300, the Chairman of the selection committee should not be from the ICAR and should be an outsider. In a separate minute dated 11-1-71 Mr. F. A. Ahmed, Minister of Agriculture, stated as follows :—

> "I have looked through the bio-data of different candidates for the various posts. While it appears to me that the case of Shri Gupta may not be very strong in the light of his confidential remarks, in the selection of candidates it would be difficult to feel that objective criteria were always used. Particularly in the case of Shri B. S. Joon and Shri T. A. Sriram, the selection does not appear to be fair as there are candidates who have had better experience, academic qualifications and publications. There are certain Ph. D. candidates also involved who have not been selected through in one case even the qualifications were relaxed to accommodate Shri Sriram."

While dealing with the same case, he further remarked as follows :

"In view of the controversy I would like this post also to be re-advertised and a fresh panel of experts decided to interview. No one who was associated with the previous interview Board should be on this Selection Committee.

From the Summary it appears that the Selection Committee have not even favoured Shri Gupta's continuance on the panel of scientists, a post which he is holding for quite some time now. This seems to me rather harsh. From his bio-data, I find that he has 20 years experience and even though his Dossier was not outstanding, it was none too bad. I am surprised, therefore, at this situation."

4.9. The Minister of State for Agriculture, Mr. A. P. Shinde, remarked as follows in another minute dated 23-6-71 in regard to selection for the post of Project Coordinator, Forage Crops, I.G.F.R.I. (The detailed examination of this case appears elsewhere in our Report.)

"I am glad DG has looked into this case. But I am really shocked and surprised with the decision of the selection committee. This will cause serious damage to the prestige of our scientific organisations. Recently I am getting numerous complaints the way selections and appointments are made by IARI. I think it is high time we review the position in consultation with Dr. Swaminathan. I entirely agree with the approach of DG. Dr. Patel may be appointed."

These observations made by the Minister speak for themselves.

4.10. In its first meeting on 24th July, 1972 the committee decided to make a request to the Director-General, ICAR for making available to the Committee for its scrutiny all recruitment files from 1-4-66 onwards. By 31st July, 1972, ICAR had made available a total of 879 files containing proceedings of selection committee for scientific and technical posts of Class I category, recruitment for which had been made by the CIAR itself. Subsequently, for a sample examination, files relating to recruitment to Junior Class I posts in the Indian Agricultural Research Institute from 1-4-66 have also been obtained. Apart from grave irregularities which have been observed in individual selections made by the ICAR, and which appear elsewhere in the report, various serious procedural irregularities have also been noticed.

Files regarding constitutions of selection committees

4.11. We were told by the ICAR in a communication dated 31st July, 1972 that in the initial stages, the selection committees, with a view to keeping absolute secrecy in the matter, used to be formed by the DG, ICAR himself in consultation with Secretary, ICAR, Director, IARI and one or two experts. No files pertaining to that period were kept. The practice of keeping regular files was started only from July 1968 and these files were made available to the Committee. Subsequently, while clarifying the issue, the ICAR intimated that approval of the Minister in his capacity as the President of the ICAR was being obtained wherever required in the bye-laws on files, and some folders containing records relating to constitution of some selection committees were made available. The former Secretary of the ICAR, Shri K.P.A. Menon informally called upon the Chairman, ICAR Inquiry Committee on 13-11-72 and the Chairman requested him to explain the non-availability of these records while sending his reply to the questionnaire already sent to him and his own additional comments for the information of the Committee. It appears that Shri Menon on his return from this meeting raised the question with the ICAR authorities, and on 18th November, 1972, we were supplied with papers relating to composition of selection committees of more than 50 posts. The overall position now is that while the number of missing files is not large, it appears that the records were not kept properly.

Nomination of Chairman and experts for Selection Committees

4.12. Certain serious procedural irregularities have been noticed in the nomination of chairman of selection committees. It has been found that in as many as 53 cases, the chairman of the selection committees have been experts other than the Minister's nominees, though their names did appear in the panel put up for the approval of the Ministers. In 42 cases it has been noticed that the chairman have been experts other than Minister's nominees and their names did not even figure in the panel proposed by the DG for approval of the Minister. There are 9 cases in which the selection committees have been presided over by experts who had neither been appointed by the Minister, nor had their names appeared in the panel. In all these cases, the Minister's nominees also happened to be members of the selection committees. The Committee has been informed that it became necessary on several occasions to invite an expert other than the Minister's nominee to become the Chairman of the Selection Committee when the former indicated his inability to come. In our view, it would have been more regular if a contemporaneous record had been kept to show why it became necessary to appoint a person as chairman other than the one nominated by the Minister and even then to secure the previous approval of the Minister for the change proposed. We feel that such a course would not have presented any difficulty whatsoever.

4.13. A large number of allegations have been made before the Committee in representations received by us and in oral evidence, that appointment of experts and chairman appeared to be manipulated to suit certain individual candidates. The experts often were mere generalists and did not belong to the specialised branches for which selection was being made. The same set of experts was invited again and again for becoming experts in certain subjects even though other eminent experts in those fields were available. To have a sample check in respect of this allegation the constitution of selection committees in Microbiology, Agricultural Engineering and Biochemistry Divisions of IARI was scrutinised. The results are indicated below :

(*a*) *Microbiology Division*

Total number of posts—12

One scientist acted as expert in 7 committees.
Another scientist acted as expert in 4 committees.

(*b*) *Biochemistry Division*

Total number of posts—16

One scientist acted as expert in 7 committees.
Another scientist acted as expert in 5 committees.
Another scientist acted as expert in 4 committees.

(*c*) *Agricultural Engineering Division*

Total number of posts—9

One scientist acted as expert in 7 committees.
Another scientist acted as expert in 4 committees.
Another scientist acted as expert in 4 committees.

4.14. An eminent scientist (Witness No. 27) told the committee in his evidence that once he was asked to serve as a member under one of his erstwhile junior officer though earlier he was invariably called as Chairman. Another eminent scientist (Witness No. 127) who had worked as expert on a number of ICAR selection committees, deposed before the Committee that in one particular selection the decision taken in the forenoon, was sought to be changed in the afternoon. He opposed this change, and though his point of view was accepted at that time, subsequently he has never been called as an expert on any selection committee.

Ad hoc Appointments

4.15. *Ad hoc* appointments made by the ICAR have been severely criticised before the Committee in the representations received by us and in oral evidence. While the general practice followed by the ICAR was that as far as possible, *ad hoc* appointments should be avoided, in effect on many occasions this rule does not seem to have been followed. Both for posts falling under the control of the Directors and those falling under the control of the DG, the power to make *ad hoc* appointments has been frequently resorted to. In certain cases, *ad hoc* appointments have been followed by regular appointments in favour of the *ad hoc* appointees. It has been alleged before the Committee that these persons have been favoured in regular selections as compared to other candidates who were not holding the *ad hoc* appointment. A better course of action would have been to have an officer-incharge only of current duties so that he would not have any undue advantage over other candidates. At least in those cases where new posts had been created, the appointments should have been made by regular selection procedure. Also it is noticed that these *ad hoc* appointments have been continued for too long in contravention of the bye-laws. Some of such cases which have come to our notice are indicated below :—

1. Appointment as Chief Production Officer in *ad hoc* capacity on this post on 2-4-68 and in regular capacity on 6-12-68.
2. Appointment as Chief P.R.O. in *ad hoc* capacity on 7-1-69 and in regular capacity on 4-12-69.
3. Appointment as Director, Central Rice Research Institute in *ad hoc* capacity from 5-4-66 to 19-3-69. The individual was first regularly appointed in a lower scale, and then selected again for the same post in a higher scale.
4. Appointment of a scientist as *ad hoc* Deputy Agricultural Commissioner from 26-2-66 to 1-1-70, as *ad hoc* Assistant Director General from 1-1-70 to 2-2-71 and regularisation in this post after that.
5. Appointment of a scientist as Officiating Deputy Development Adviser (Animal Husbandry) from 25-3-65 to 31-7-66 and as Officiating Additional Deputy Animal Husbandry Commissioner from 1-8-66 to 31-7-69, Deputy Animal Husbandry Commissioner from 1-8-69 to 31-12-69 and A.D.G. (Animal Health) from 1-1-70 onwards. He does not even fulfil the essential qualifications prescribed for the post.
6. Appointments as Agronomist in Jute Agricultural Research Institute from 25-8-70 in *ad hoc* capacity and in regular capacity from March 1972.
7. Appointment of a scientist as Officiating Director, Central Coconut Research Institute from 27-11-67 to January, 1970, and as Joint Director, C.P.C.R.I. from January 1970 to June 1971. He also did not fulfil the minimum qualifications prescribed for these appointments.
8. Appointment as Officiating Senior Soil Conservation Officer from January 1966 to February 1967 and from 1-10-67 to 13-10-70.
9. *Ad hoc* appointment as Head of the Division of Agronomy, IARI on 1-6-71.

Prescribing of Qualifications

4.16. The procedure for prescribing of qualifications when recruitment was made through the UPSC was that for all individual posts, qualifications had to be separately prescribed by the Institutes in consultation with the UPSC. In the ICAR, qualifications for individual posts were approved at various levels. For the first time in May 1967, instructions were issued by the ICAR prescribing model qualifications for different categories of posts. These qualifications indicated in general whether Ph. D. or any Post-Graduate qualifications was required for that post. The model qualifications also laid down the number of years of research and teaching experience required, and the requirements as to the maximum age. These

instructions were further emphasised in 1970 and the model qualifications were also suitably revised. The Committee has received a number of suggestions and complaints on this subject. The main points of dissatisfaction in this regard are indicated below :—

(*a*) The qualifications were very general in nature and did not fit in with the special requirements of individual posts. At a time when more and more specialised fields of research were coming up, to apply the same set of model qualifications to several sub-disciplines, was not appropriate.

(*b*) Qualifications prescribed did not make any distinction between candidates who had secured different divisions in the examinations. This practice caused dissatisfaction among the candidates.

(*c*) In certain cases, qualifications are alleged to have been tailored mainly to suit certain individuals.

(*d*) Relaxations have been made in academic qualifications though no such power rested with the DG or the President.

4.17. The system of recruitment followed by the ICAR since 1966 in retrospect appears to have suffered from the following main shortcomings :

1. Absolute power had been concentrated in the hands of the Director-General, ICAR. It was he who nominated the official members of the selection committee; he who nominated all external experts for posts of Rs. 700 to Rs. 1600, and two external experts for posts of Rs. 1600 onwards. He also had a very important role in finalising the Minister's nominations since he was putting up proposals to the Minister who is not a scientist.
2. The selection committees, including the nominations by the DG of experts, were weighted in favour of the Official side. This situation was further aggravated because in a large number of selection committees, the requirements about the minimum numerical strength of outside experts was not followed in practice.
3. The time available to the selection committees for the assessment of the candidates who appeared before them was too short for finding out the merits of the candidates. We have been informed that the bio-data of the candidates were invariably not supplied in advance and were given to the members of the selection committees only at the time of the meeting.
4. *Ad hoc* appointments made by the ICAR have been severely criticised before the Committee. They have been continued for abnormally long duration and in one case for a period of five years. Such a course gives rise to the feeling that the power for making *ad hoc* appointments has been utilised for purposes of favouring individuals.
5. In the absence of any outside check, the practice of including names of such candidates who had applied late, in the list of candidates to be called for interview has been indiscriminately used by the senior officers in the ICAR. It has been noticed that while the initial screening was done carefully by the Director/Head of the Division concerned and apporoved by the DG, names have been later added indiscriminately without any such careful scrutiny. In one case a candidate had been called for interview who had met a senior scientist of the ICAR on the date of the interview and the said senior scientist in fact acted as a member of the selection committee and the committee selected the said candidate. In our opinion the least the Senior Scientist ought to have done was not to have attended the meeting of the selection committee.
6. The model qualifications prescribed by the ICAR for posts under different categories suffer from vague generalisations. Prescribing one model qualification for several posts in a particular category, under various disciplines, in different Institutes, could hardly be justified.

7. The experts called on many occasions were not specialists in the particular field.

8. The time taken in recruitment was more than the time taken by the UPSC.

Recruitment to Junior Class I posts in IARI (Rs. 400—950)

4.18. As stated above, it was decided to examine recruitment to this category made in the IARI as a sample. The first selection in this category was made in May 1967, and till 1971, in all 38 advertisements have been issued and recruitment made for 181 posts. According to the Bye-laws of the ICAR, the Chairman for these selection committees was to be appointed by the DG, ICAR. In practice, however, it has been noticed that the concerned Head of the Division has acted as the Chairman of the selection committee in all the cases without any specific or general authorisation of the DG, ICAR. This practice continued till May 1972 when the attention of the Director, IARI, was drawn by the ICAR towards the provisions in the Bye-laws. Chairman of these committees are since being appointed with the approval of the DG, ICAR. We had requested the Director, IARI to clarify this position. He has replied that this was being done on the basis of D.O. No. Dy. 764/67-Reorg. (Admn) dated 28-2-67 of the Secretary, ICAR, addressed to the Director, IARI in which he had accepted the proposal of the Director, IARI that the respective Heads of Divisions could act as Chairman. From the subsequent communication received from the ICAR, it is obvious that the stand taken by the Secretary in his D.O. of 28-2-67 was not in accordance with the bye-laws and the appointment of Heads of Divisions as Chairman of these selection committees was not regular. In the context of wide and varied allegations which have been made before the Committee about the partiality of the Heads of Divisions, this matter becomes all the more serious.

4.19. We must confess that this gross breach of the bye-laws committed allegedly at the instance of the Secretary, ICAR has caused us grave concern and so we are not surprised that appointments made by the selection committees over which the divisional heads presided created considerable dissatisfaction on the campus.

4.20. As regards appointments of other experts on the selection committees, there used to be two experts nominated by the DG, ICAR. In many cases they have been outsiders and in some cases, in addition to one outside expert, a representative from the ICAR had been taken in the selection committees. The appointment of experts by the DG was done on the recommendations made by the respective Heads of Divisions and it appears that these recommendations were not made from any pre-prepared panel but each case was dealt with individually on an *ad hoc* basis by the concerned Head of the Division. This was also an objectionable procedure.

Reviewing of appointments since 1966

4.21. Having made these general observations in relation to the system of appointments in force, we propose to refer to our examination of individual cases of appointments. During the course of debates in Parliament following the suicide of Dr. Shah, the M. Ps. criticised the system of appointments and also referred to various specific irregularities. The Minister for Agriculture in his reply in Parliament had stated that the Government did not want to review all the appointments which had been made since 1966, but the Committee would be free to examine such appointments as it might feel necessary. Soon after its appointment, the Committee was flooded with a large number of representations alleging irregularities in appointments and also claiming for relief. In all, about 500 representations have been received by the Committee. The representations broadly fall under the following categories :—

(*a*) Representations containing allegations or irregularities in appointments.

(*b*) Representations regarding promotion.

(*c*) Representations regarding seniority.

(*d*) Representations regarding better scales of pay.

(*e*) Miscellaneous.

4.22. The Committee considered this question and decided that the individual representations received should be examined for ascertaining whether the relevant appointments suffered from any irregularities as a result of the operation of the existing system. In attempting this, the Committee scrupulously avoided to deal with the merits of the case, or in any manner sitting in judgement over the decisions of the selection committees. The results of our detailed scrutiny are described in Appendix VIII where we have selected some typical cases which show that the sytsem was capable of being manipulated in making individual appointments. We have taken care to avoid mentioning names in our comments on these individual cases.

CHAPTER V

STRUCTURE OF ALLIED ORGANISATIONS—BRIEF SUMMARY

5.1. The Committee is of the opinion that re-organisation of agricultural research and education is necessary to strengthen agriculture in the country. In order to find out the most effective structure for this purpose, the Committee decided to study the organisational set up of some allied scientific organisations like the Atomic Energy Commission, Council of Scientific and Industrial Research, Indian Council of Medical Research and Defence Science of the country and the agricultural organisations of some of the advanced countries like the USA and USSR where rapid strides have been made in agriculture. A brief summary of each organisation is given below :—

INDIAN ORGANISATIONS

Atomic Energy Commission (AEC)

5.2. The Atomic Energy Commission is the policy making body for all aspects involving the peaceful uses of nuclear energy in the country. It has all the powers of the Government and has six members though the total membership can go upto seven. The Chairman of the Commission is the Secretary of the Department of Atomic Energy. Member for Research and Development is the Director of the Bhabha Atomic Research Centre and all financial matters are referred to the Member Finance for his approval. The Bhabha Atomic Research Centre (BARC) is the major institution of AEC for research and development. Hence a short review of the functioning of BARC is given here as a model.

The policies and programmes of BARC are formulated and executed by the scientists and engineers of the Centre. The administrative and other supporting staff help the scientists and engineers in implementing the scientific programmes. The centre is under the charge of a Director who is assisted by a "Trombay Council" which consists of Directors of seven Specialised Groups and the Director of the Centre. The Chairman of the Atomic Energy Commission is Honorary Adviser to BARC, and is invited to all meetings of Trombay Council which determines policies and programmes of research.

5.3. The Scientific programme is organised under seven groups—(1) Chemical, (2) engineering, (3) bio-medical, (4) physics, (5) reactor, (6) engineering services and (7) electronics and instruments. Besides the above, there is an administrative group headed by a Controller which looks after the routine matters of the Centre. Each group has under it several Departments and it reviews and coordinates the work of different Division and Sections under it.

5.4. There is a "Trombay Scientific Committee" for giving directions to the Groups to implement the Scientific programme decided by the Trombay Council. It consists of all Heads of Divisions and Directors of Groups. It is chaired by the Director of BARC. Each Head of the Division is incharge of implementation of scientific programme in his Division. The Divisional Council reviews and coordinates the work within the Division.

5.5. Financial and administrative powers have been delegated not only to the Directors of Groups and Heads of Divisions but also to individual scientists. If the money involved exceeds a particular limit, it is handled by the purchase and Stores Division.

5.6. The Group leaders are not necessarily the highest paid scientists. They are chosen for their good managerial capacity. The promotion of a scientist does not depend upon the vacancy. His work is assessed periodically and he is promoted, if found suitable, even if there is no vacancy.

Recruitment.—Scientists and Engineers are recruited (a) through training schools, (b) through advertisement and (c) by direct recruitment.

5.7. (*a*) Training School was started in 1957. An annual recruitment of upto 200 junior scientists is made by this method after advertisement for which candidates with B.Sc. and M.Sc. degrees are eligible. Selection is done after an interview. The selected candidates get Rs. 400 per month and stay in BARC hostel. The training includes lecture and laboratory work for one year during which period continuous evaluation is done by examinations. Successful candidates are placed in the scale of Rs. 400—950 after one year. The candidates on joining the service sign a bond to serve the Centre for three years. If they leave the Centre within that period, they refund this stipend. A good cadre of scientists is built up internally by this method.

(*b*) *Advertisement.*—If a post is urgently needed, then the Head of the Division gives justification for filling such a post to the Trombay Council and the Scientific Committee. If approved, an advertisement is made, screening of candidates is done by the Group and the selection is made by an interview (*see* below).

(*c*) *Direct recruitment.*—Sometimes, highly qualified scientists apply for jobs in the Centre. In such cases, applications are sent to the Heads of Divisions, confidential reports from two outside experts are obtained and then the applications are referred to the Group Board. Then the candidates are called for interview. Such candidates are considered even when they are outside the country.

5.8. Recruitment of technical staff is made through the employment exchange or by advertisement. Draft advertisements are received by the Recruitment Section and then approved by the Trombay Scientific Committee. The applications are sent to appropriate standing committees of Groups. Then trade tests and interviews are held.

5.9. *Promotions.*—There is no sanctioned strength in scientific and technical cadres. The posts are created whenever wanted. The proposal for promotion of staff is considered twice a year. An officer sends recommendation for promotion of a person through the Head of the Division to the Group Board. It is then screened by a Committee of the Board which also looks into the confidential record. If a candidate is not suitable, the case is dropped. If a candidate is suitable, then the proposal is sent to the Selection Committee which consists of members from the same discipline and also from allied disciplines who look into parity of qualifications of staff of different departments. If necessary, an outside expert is invited. The final authority for promotion in the lower cadre is the Group Director or the Head of the Division and for higher posts it is the Director of BARC.

5.10. The promotion criteria for technical staff is similar to those of scientific staff.

5.11. *Selection for various cadres.*—Staff for Class II and higher posts are recruited by selection committees. Class III staff are selected through Employment Exchange followed by trade test and interview. Class IV staff are selected through Employment Exchange.

5.12. The Selection Committee for Class II posts consists of 7 members of whom three are in the same field, two are experts in the field of specialisation and the other two are from allied fields.

5.13. The Selection Committee for Class I and higher posts consists of 7 members—generally three outside experts nominated by the Group, Heads of the Division who is a co-opted member and the rest are from allied subjects.

5.14. There are 15 scales of pay for scientists beginning from Rs. 400/- upwards. The highest paid scientist/engineer gets Rs. 3,000/- (fixed).

Council of Scientific and Industrial Research (CSIR)

5.15. This Council was established in 1942 as a Society. It is for promotion, guidance and co-ordination of scientific and industrial research in India including institution and financing of specific research projects. It is an autonomous body. It has 34 Institutes under it, each headed by a Director. It has a Director-General having the status of Secretary to the Government of India. It has a Governing Body consisting of about 35 members of which the Prime Minister is the President and the Minister in-charge of the portfolio is Vice-President. The other members include the Director-General, all donors of not less than Rs. 5 lakhs, a member from the Ministry of Finance, two members of the Board of Scientific and Industrial Research who are elected by the Board from among its members. It is a policy making body and has several non-scientists. It meets at least once a year.

5.16. There is a Board of Scientific and Industrial Research which is the main scientific and technical advisory body of the Council. It consists of members representing science, engineering and industry and some Departments of Government of India. Proposals on scientific and technical items are referred to this Board. This Board initiates, guides and supervises research projects and examines and coordinates research schemes.

5.17. There are 13 Research Committee dealing with various scientific and engineering disciplines under this Board which are responsible for giving research grants to individual scientists, establishment of scientific and technical institutions and selection of scientists for fellowships. CSIR has a Secretary and a Financial Adviser. Each Institute has an Executive Council. It consists of Director-General, Director of Institute and members nominated by Governing Body. A person not connected with CSIR is its Chairman. It meets at least twice a year.

5.18. Recruitment for the post of Director, Joint Director and Deputy Director is done after advertisement. Applicants are interviewed by a Selection Committee which consists of a Chairman who is an eminent person not connected with CSIR and nominated by the President, two or three experts who are nominated by the Core Committee of the CSIR and approved by the Vice-President, members of the Core Committee for the post, Financial Adviser to CSIR and Secretary to CSIR. The Core Committee consists of the D.G. and four scientists or technologists nominated by the Vice-President. The Selection Committee has the authority to consider candidates who may not have applied for the post. The President has the authority to invite an eminent scientist for any of these posts for six years.

5.19. Assistant Director and Senior Scientific Officers are selected by a selection committee of which the D.G. is a member. The Vice-President nominates an eminent scientist, not connected with CSIR, as its Chairman. Besides these, the Committee has one expert who is nominated by the Chairman of the Executive Council of the Laboratory, Director of the Laboratory and any other expert nominated by the Vice-President.

5.20. The Committee reviews and recommends the names of selected candidates to the Vice-President. The Vice-President has the authority to invite any scientist to act as Assistant Director for one year and the Director-General can appoint a Senior Scientific Officer for one year.

5.21. Other scientific and technical staff are appointed by the Director of the Institute after advertisement. The Selection Committee consists of Director, Secretary of CSIR, two experts nominated by the Chairman of the Executive Council, one expert from outside and Head of the Division.

5.22. Promotion of Senior Scientific Assistants and lower staff is done after assessing their work at the end of five years. This is done by the Director-General, Director of the Institute and two experts. For higher posts, the work is assessed by a Committee appointed by the Vice-President. The Committee consists of three outside experts and members of the Executive Council of the Institute. If the candidate is found suitable, he is promoted to next higher grade. This is done by conversion of the lower grade to the higher. The Vice-President has the authority to give merit promotion and advance increments to a scientist who has produced good work.

5.23. The Government of India had appointed a committee in 1968 under the Chairmanship of Justice A.K. Sarkar to suggest methods of improving the working of the CSIR. Some of their recommendations are of relevance to this Committee and are mentioned below :—

(*a*) The posts should be classified into Scientific, Technical and Administrative.

(*b*) Minimum qualification should be mentioned for each post. If any relaxation of qualification is made for recruitment, the selection committee should record the reason for doing so.

(*c*) Any change of rule regarding the age of retirement and extension of service should be approved by the Government.

(*d*) Posts should not be transferred from one laboratory to another. If a post is not needed, it should be abolished.

(*e*) There should be model qualifications for different categories of posts and any deviation from these must be recorded.

(*f*) Persons responsible for reviewing and scrutinising qualifications of applications to various posts should mention to the members of Selection Committee the reasons for screening out certain candidates.

Defence Science

5.24. This is under the Ministry of Defence. The work of scientists and of other persons of Defence Science is of a special nature as it concerns the defence of the country. So the research work in this Department is more or less of a secret type. It has 38 establishments/laboratories. There is a Defence Research and Development Council headed by the Minister for Defence. The Minister of Production is its Vice-Chairman. Chief of the three Services, Defence Secretary, Secretary for Defence Production and Scientific Adviser are its members. The Scientific Adviser has the status of a Secretary to Government of India. The functions of the Council are formulation of research and development programmes and review of work done by R & D Wing of the Organisation.

5.25. Recruitment of scientists is done by (a) direct recruitment after advertisement, (b) promotion and (c) transfer or deputation. 50% of the posts of Junior Scientific Officer and of Senior Scientific Officer are filled by promotion from the next lower cadres. Higher posts are filled by promotion or by direct recruitment, there being no fixed quota for promotion. Directors of Institutes and the Chief Scientist are appointed by direct recruitment. No officer is considered for promotion if he has not completed three years of service. All direct recruitments are made through the UPSC. There is a Departmental Promotion Committee for considering the promotion of staff already employed in Defence Services.

5.26. The Selection Committee for Class I posts (excluding Director and Chief Scientist) consists of one member of UPSC (Chairman), Scientific Adviser and Joint Secretary. The Selection Committee for Class II posts consists of the Scientific Adviser (Chairman), Joint Secretary and one member from the Technical Division concerned.

Indian Council of Medical Research (ICMR)

5.27. The ICMR is a society registered since 1949. Its aims and objects are persecution, assistance and initiation of research projects of medical importance in its own institutes and in other institutes. The Director-General is its executive head. He does not have the status of a Secretary as that of CSIR and ICAR. The Council has a Governing Body with the Union Minister of Health and Family Planning as its President, and Secretary, Ministry of Health as its Vice-President. Its members are D.G. of Health Services, D.D.G. of Health Services, some other Government officials, some Directors of its institutes and other organisations. The Director-General of ICMR is its Member-Secretary. It has a total of 17 members who are appointed for a period of two years. There is an Executive Committee which is presided over by the President of the Governing Body. It has six members and the D.G., ICMR, is its Member-Secretary. It takes care of current duties of ICMR. The Council has a Scientific Advisory Board consisting of 16 members including the Director-General of Health Services who is its Chairman, and the D.G., ICMR, who is its Member-Secretary. It has 35 Advisory Committees for various aspects of medical research. They are further grouped into four categories : (1) Basic Sciences, (2) Clinical Sciences, (3) Fertility, Health and Nutrition and (4) Communicable Diseases. Each Committee has 6 to 7 members. It has 7 Institutes which are concerned only with research and not with teaching. It has also several semi-permanent units for research on different aspects of medical sciences.

5.28. Appointments of scientists for each institute upto the level of Senior Research Officer are made by selection committees which consist of the Director of the Institute as its Chairman and 3 experts. For higher posts, the Director-General and 3 experts make the selections. D.G. forms the panel after advice from the Directors and also selects the experts from this panel. An outstanding scientist in a particular grade may get a merit promotion to an ex-cadre post on assessment of his work after 5 years of service in a particular grade.

Foreign Agricultural Organisations

U.S.A.

5.29. The Agricultural Scientists of USA are under the U.S. Department of Agriculture which has three Sections—Agricultural Research Service (ARS), Economics Research Service and Forest Service. The ARS has several Institutes located in various parts of the country. Each institute has projects concerning agricultural research in the surrounding area. Research in all the Institutes is coordinated and any duplication of project is avoided. None of the Institutes does teaching.

5.30. The selection of research scientists is done according to Civil Service Rules of the Government. Applications are received by the Department of Agriculture from eligible candidates in the country. No advertisement is made in news-papers. When enough applications are received, three to five experts, all agricultural scientists and all belonging to the Department of Agriculture, assess the merits and demerits of these scientists. No interview is held. Letters of reference from referees for each candidate are considered while evaluating the competence of a scientist. The names of selected candidates for each discipline of agriculture are listed in order to merit.

5.31. Requests for junior scientists for specific types of jobs are sent by Directors of Institutes to the Department in Washington and the office sends three names from the top of the list. The Director generally accepts one of them who is then appointed in the Institute. If the Director does not accept any of the names, the office then sends the names listed below these names. The scientists are appointed on a probation basis for one year, at the end of which their services may be terminated if their work is found unsatisfactory.

5.32. The candidates chosen by the Department do not necessarily have agricultural degrees. Scientists from other disciplines also apply and the experts in the Department select candidates for each discipline according to the job requirements. Thus entry at the junior-most level is done by the Department. If their work is found satisfactory at the end of the probation period, they continue to get promotion after periodic assessment. A scientist of an Institute may send his own bio-data to the Department to grade him and to place him in a higher post. The bio-data is then assessed by the departmental experts whose decision is final. Sometimes, an Institute may require a scientist at a higher level if it desires to open a new field. In such a case, the Director requests the Department to name a candidate. If the Department does not have anyone in view, the Director is free to contact any candidate from a University or elsewhere and appoint him with the approval of the Department of Agriculture.

5.33. Once a scientist enters the service, he has two avenues, (a) he can remain as a scientist and continue to get promotions and higher emoluments which may exceed that of the Dierctor, or (b) stay as a research administrator. Sometimes, there may be more than one scientist in the institute who may draw more salary than the Director. So the scientists do not change their speciality or positions for better emoluments.

5.34. The Director has a Staff Council where the research projects and the problems and progress of the Institute are discussed. The performance of each scientist is evaluated every year. The Director evaluates the work of Assistant Director, the latter evaluates that of the Project Leader who, in turn, evaluates the individual scientist's work. Increments in salary and promotions are given on the basis of this evaluation. There is no interview or competition with other candidates.

U.S.S.R. :

5.35. Agriculture is under Government control. Students take up Agriculture Course after passing High School. This is a five-year course at the end of which the successful candidates serve for three years in a farm. They are either absorbed in the same farm or enter research institutes in agriculture.

Research Institutes :

5.36. The junior-most post which an Agricultural Scientist joins after passing Agricultural Course and training is that of an Assistant. He goes on getting promotion from this post upto the level of Director, if found fit. The promotion to higher post is decided by the faculty, consisting of members from the same discipline, a few from other disciplines and one representative of students, who periodically assess the work of Assistants. An employee who is found suitable, is recommended for promotion. If a person feels that he is more qualified than the person promoted, there he may make a representation to the Ministry of Agriculture in Moscow. The Ministry then calls for explanation from the Faculty. If the explanation is satisfactory, the selection is approved. If not, the selection may be disapproved. Promotion to a higher post is not based on seniority.

5.37. There are fixed number of posts for each category in an Institute. At times two candidates may be suitable for one post. In that case, an additional post in the same Department is created by transfer of a post of similar category from another Department where it may be vacant. Thus, the good scientists are absorbed and discontent among scientists is avoided.

5.38. An Assistant, on promotion, becomes an Associate. The promotion of an Associate to the post of Professor is considered by the Ministry of Agriculture in Moscow. Applications are received by the Ministry and scrutinised by an expert panel appointed by the Ministry. The experts are taken from the entire country and are chosen by the Minister who is himself an Agricultural scientist. The experts

consider the research output and other records of the candidate and recommend the names to the Minister who is the final authority to appoint a Professor. Seniority is not considered important for such jobs. The expert panel is selected for three years.

5.39. The highest post in an Institute is that of Director who is selected by the Ministry of Agriculture from amongst the Professors of the Institute or from other Institutes. For such jobs managerial capacity is considered more important than research alone. Sometimes, even an Associate Professor may become a Director. A Director is appointed for a tenure of three to five years. His extension depends on performance.

5.40. *Farms.*—Appointments in farms are made from amongst the graduates of Agriculture after they undergo training for three years. They enter farms as specialists of specific disciplines and go on getting promotion from this post based on periodic assessment which is done by the Director and a few other senior agriculture scientists of the farm. The Director is apopointed by the Central Government. His appointment is on a tenure basis. If the productivity of the form is not good, he is replaced by another Director.

5.41. The research programmes of each Institute are decided by the Scientific Council of the Ministry of Agriculture in Moscow. This Council consists of different groups like soil science, plant breeding, agricultural chemistry, water management, etc. These groups decide the research projects and allocate them to different institutes where the work is carried out.

5.42. The Director is in overall charge of all research projects of the Institute. This is comparable to All-India Coordinated Projects of ICAR except that in USSR the Director of the Institute is the Chief Coordinator whereas under the ICAR any scientist of an Institute may be the Chief Coordinator. The research projects in the Ministry are formulated and planned by scientists drawn from the entire country as is done by the ICAR in formulating each All-India Coordinated Project.

5.43. Incidentally we may add that this broad survey will indicate that the recommendations which we propose to make in regard to the organisational structure for guiding agricultural education, research and extension bear resemblance to the structure of similar organisations adopted in countries like the USA and USSR which have made remarkable progress in agriculture.

CHAPTER VI

WRITTEN AND ORAL EVIDENCE

(*i*) Analysis of Answers to Questionnaire :

6.1. Three sets of Questionnaire (Appendix II—Parts I, II & III) were prepared by the Committee for Directors of Research Institutes (Part I), Heads of Divisions (Part II), and individual scientists and other staff (Part III) of ICAR and were distributed to them in the first week of August to elicit answers on specific matters. They were also requested to make suggestions which would help the Committee formulate effective recommendations. The questionnaire meant for the scientists were also distributed to other categories of staff at ICAR Headquarters and Institutes of ICAR Also, other persons who have knowledge of the ICAR were requested to give answers to the questionnaire. In the beginning, it was intended to elicit answers only from scientists. However, during our visit to the IARI on September 29, 1972, several Research Assistants, Technicians and other categories of staff requested the Committee to give them an opportunity to answer the questionnaire. Accordingly, all Directors of ICAR Institutes were requested to distribute the questionnaire meant for individual scientists to other categories of staff also.

6.2. The last date for receiving answers to the questionnaire was September 9, 1972. However by then, sufficient number of answers had not been received by the Committee. The employees of various Institutes complained that the Directors had not distributed the questionnaire in time. So they were unable to send the answers within the prescribed date. Therefore, the last date was extended up to September 30, 1972. The Committee also noted that several of the Directors, A.D.Gs. and D.D.Gs. and D.G. had not sent answers to the questionnaire. So, letters were written to them requesting them to expedite sending their answers to help the Committee in the discharge of its work. We are happy to note that the response to the questionnaire has been very good. 51, 161 and 2,455 answers from ICAR staff were received for Parts I, II and III respectively. The D.G., 3 D.D.Gs., 8 A.D.Gs. and all the Directors of Institutes have answered the questionnaire. Also, answers have been received from 233 persons not belonging to the ICAR The total number of answers received is 2,667.

6.3. A summary of the answers of the three categories of staff to the respective questionnaire is given in Appendix V, a, b and c. It is very heartening that in general the answers to the questionnaire indicate a progressive outlook and a desire of the scientists of the ICAR to improve the working conditions including recruitment. An over whelming majority of scientists and employees do indeed wish to work for the betterment of the organisation and of the country. Some of the significant answers which have helped us to formulate our recommendations are given in brief here.

6.4. An over whelming majority of scientists and most of the Heads of Divisions want that there should be rotation of the post of Head of Division among the senior scientists of the Division for a period of two to three years on the basis of seniority. The administration of the Division should be done by a Divisional Committee consisting of scientists of different categories proportionate to their number. This Committee should have a tenure of two years and should look after the development plans, annual budget, research projects, propasals for staff and advertisement for their appointment, allocation of research students and teaching work to staff, facilities to the scientists for research, evaluation of research proposals and research work, deputation of staff to attend seminars and to undergo training

inside and outside the country. These functions indeed over the entire gamut of working conditions of scientists of all categories.

6.5. A large number of scientists want promotion to the next higher grade irrespective of vacancy on the basis of seniority and merit. This promotion should be given after a period of five years after assessment of the work of the candidate by both external and internal experts. We are happy to find that scientists want that proper assessment of their work should be done before any promotion is given to them. It is also encouraging to note that a majority of the scientists want that a scientist who does not do his work properly should be dismissed, while those who are doing good work should get increment or promotion. Our scientists, therefore, realise that inefficient workers should be weeded out because such workers withhold progress and are responsible for the unacademic atmosphere in the scientific community. Even though they want a running scale to be introduced to benefit good workers, they want also that punishment should be given to inefficient workers.

6.6. A very large majority of scientists are not satisfied with the present recruitment procedure. They want the presence of both external and internal experts in the Selection Committee. There should be three to five experts who should be selected from a standing panel of experts. They also want the presence of Departmental authorities in the Selection Committee. Interviews should be held only for the junior-most post. Later, they should get promotion depending on the evaluation of their work periodically. They have suggested that both seniority and qualification should be taken into account largely. Performance at the interview should be given less weightage.

6.7. A majority of scientists want that their appointment should not be of a tenure type. It is not surprising that a scientist would like to feel secure in his post so that he would be able to devote himself whole-heartedly to research and not bother about another job after a certain period. This is of relevance under the present conditions of the country and lack of suitable jobs.

6.8. Several scientists have complained of lack of facilities for research work in the Division including non-availability of research funds, interference by superiors in routine work, lack of laboratory and library facilities, etc. They want that their names should appear along with their superiors in research papers. This is indeed very good of the scientists because after all supervisors give the idea, scrutinise the work, correct the thesis and help in writing the papers. It is also a credit for the supervisor, because building up of a scientist is as important and difficult as doing research oneself. The scientists want that research papers should be sent for publication only after proper screening. This is extremely important for a field like agriculture, because publication of any work whether in a research journal or newspaper, has an affect. If a particular piece of work, not properly conducted side by side with good control is published, it is likely that this work may not be of any use when applied in the field in various parts of the country.

6.9. A large number of scientists have mentioned that there is a lot of switching over of scientists from one field to another. This is presumably because of better emoluments and this means loss of experienced hands from various fields.

6.10. The response received by the Committee to its questionnaire is very gratifying indeed, and it has helped us in formulating our recommendations.

(*ii*) Broad summary of oral evidence

6.11. In its second meeting held on 19th August, 1972, the Committee discussed the question of taking oral evidence from various categories of people. The Chairman was requested to write personal letters to the Members of Parliament who had taken part in discussions arising out of the suicide of Dr. Shah requesting them to meet the Committee for formal evidence. The Chairman also addressed

similar letters to Leaders of recognised Political Parties in the Parliament. In all, 15 Members of Parliament (Appendix IV) appeared before the Committee and gave us the benefit of their advice.

6.12. The Committee also discussed the programme of taking evidence and the procedure to be followed in recording of evidence. It was decided that the evidence would be recorded before the Chairman and such other Members of the Committee who may be able to attend these meetings. Only those persons who had submitted written statements to the Committee or had expressed their desire, in their answers to the Questionnaire, to meet the Committee, were called to give evidence. Questions were put to them on their written statements. The witnesses were also permitted to make additional points if they so desired. The procedure followed was that the Chairman summarised the statement in the presence of the witness, and it was taken down by a stenographer. The witnesses were not required to sign the evidence but those who requested for a copy of their evidence, were supplied with the same. If any witness did not wish any of his statements to be recorded, it was complied with.

6.13. The Committee held several sittings in Delhi and also at Calcutta, Bombay, Karnal and Cuttack to take oral evidence. In addition, witnesses from other Institutes of the ICAR were also called to Delhi.

6.14. In all, 187 witnesses have been examined by the Committee. Out of these, 30 were examined in Calcutta in two different sittings, 27 at NDRI, Karnal, 26 at CTRL, Bombay, 13 at CRRI, Cuttack and 91 at Delhi. The largest number of witnesses were from IARI who numbered 46. There were 9 witnesses from ICAR headquarters. The Committee had the benefit of getting the advice of 5 Directors who appeared before the Committee. Written statements were received from all the Directors of ICAR Institutes. The Director-General, ICAR met the Committee on 14-11-1972 and had discussions with the Committee for about three and a half hours. Dr. B. P. Pal, Director-General ICAR (Retired) met the Committee on 23-10-72. In addition, the Committee had the benefit of getting the views of the following persons from outside the ICAR.

1. Shri T. P. Singh, Secretary, Agricultural (Retd.)
2. Shri Uma Shanker, Joint Secretary, Department of Personnel, Government of India.
3. Dr. M. L. Roonwal, Vice-Chancellor, Jodhpur University (Retd.)
4. Dr. R. Prasad, Emeritus Scientist, ICAR.
5. Dr. D. Singh, Deputy Agricultural Census Commissioner, Ministry of Agriculture, Government of India.
6. Dr. B. M. Lal, Head of Department of Chemistry, Haryana Agricultural University, Hissar.
7. Shri D. L. Raihan, Joint Director, Agricultural Census, Ministry of Agriculture.

6.15. The Committee could not formally examine Shri K. P. A. Menon, ex-Secretary, ICAR, because he did not respond to our communications. Later, when he offered to meet the Committee, he had neither submitted a written statement nor had he answered the questionnaire that was sent to him. Also, the Committee was not free on that particular day. However, the Chairman met him informally at the latter's request and requested him to send his comments in writing. This has since been done by Shri Menon.

6.16. The Committee was very keen on meeting Mrs. V. H. Shah and Shri Jayant Shah, brother of late Dr. Shah. It was felt that since it may be inconvenient for Mrs. Shah to come to Delhi, the Committee may meet her during its sitting at Bombay. We are grateful to Mrs. Shah that she agreed to meet us at Bombay, and accordingly we recorded her evidence as well as that of Shri Jayant Shah on 18th October, 1972.

6.17. The representatives of the ICAR Employees Welfare Association met the Committee on 10th October, 1972 and deposed before the Committee regarding their various suggestions and comments. The Committee also met the representatives of Pusa Scheduled Caste Association, IARI, on 23-10-72. In addition, during its visits outside Delhi, employees of various categories including Class IV and Class III staff met the Committee. The Research Assistants and Senior Research Assistants of the IARI submitted a well-documented memorandum to the Committee signed by about 250 Research Assistants. On behalf of the signatories to this memorandum, 4 representatives also appeared before the Committee for oral evidence.

6.18. During the course of recording of evidence, we found that many witnesses appeared before the Committee in the hope of getting redress of their grievances. A large number of them, particularly those working in the Institutes, gave instances of irregularities committed in selections. It was made clear to them that the terms of reference of the Committee did not permit it to offer redress in individual cases. Substantive allegations would, however, be examined to find out if any grave irregularities had been committeed and would be suitably mentioned in the Report, if necessary. It is our feeling that the witnesses gave their evidence uninhibitedly before the Committee. This is particularly significant since during the course of their visit to the IARI, the junior employees told the members of the Committee that they were afraid of adverse repercussions from the administration. So, on their request, entry passes for Krishi Bhavan were sent by the Committee to them and they were not asked to go to the main reception of the office. We have also been impressed by the general loyalty shown by the witnesses for the organisation.

6.19. The oral evidence of witnesses representing various categories of staff has been very useful to the Committee in formulating its recommendations. We are conscious of the fact that some of the bitterness expressed by certain witnesses may be due to the fact that they were not selected for one or more posts. The significant point, however, is that even those who had no such disappointments also had several grievances. In general, most of the witnesses made several constructive and useful suggestions for the improvement of the ICAR.

CHAPTER VII

FINDINGS ON THE STATEMENTS AND ALLEGATIONS MADE BY LATE DR. V.H. SHAH IN HIS LETTER DATED 5-5-72

Preliminary Observations

7.1. Before we proceed to record our findingns on the statements and allegations made by Dr. Shah in his letter addressed to Dr. Swaminathan on the 5th of May, 1972, it is necessary to make some preliminary observations. The terms of reference for the Committee were announced in Parliament by the Minister of Agriculture on the 25th May, 1972. Meanwhile, they had been communicated to the chairman on the 22nd May, 1972. Term (1) of the terms of reference as announced in Parliament reads as follows :—

> "To examine the underlying causes of the suicide of Dr. Shah with particular reference to specific and general points raised by him in his letter of May 5, 1972, addressed to Dr. Swaminathan."

7.2. On receiving the communication from the Minister of Agriculture along with the terms of reference as announced in Parliament, the Chairman wrote to the Minister suggesting the addition of one term as term (3) and slight modification in term (1). It would be apparent that term (1), which was announced in Parliament, suggested that the Committee was expected to examine and report on the causes of suicide of Dr. Shah and that would have meant *inter alia* a psycho-medical examination of relevant factors. The Chairman drew the attention of the Minister to this aspect of the matter and suggested that term (1) should be suitably modified so as to confine the inquiry of the Committee to the examination of statements and allegations made by Dr. Shah in his letter in question. The Minister accepted the suggestion of the Chairman and term (1) was suitably modified. This term has already been quoted by us in Chapter I of our Report.

7.3. In his letter to the Minister, the Chairman had also suggested the addition of term (3) in the terms of reference on the ground that the addition of the said term would make the inquiry comprehensive and enable the Committee to make its findings effective. The Minister accepted this suggestion as well and term (3) was added to the terms of reference. This term has also been cited in Chapter I of our Report.

7.4. Under the present modified term (1) of the terms of reference it is unnecessary for us to consider the causes which led to Dr. Shah's suicide. However we may briefly indicate the events that took place prior to the suicide. These events we have gathered from Mrs. Shah, Mr. Jayant Shah, the brother of Dr. Shah, and Dr. P.N. Patel. Dr. Patel (Witness No. 178), who is a Senior Plant Pathologist, IARI, had met Dr. Shah last on the evening of 4th May, 1972. His evidence shows that Dr. Shah came to know about the result of the interview for the post of Professor of Agronomy on the 1st May, 1972, and, when he learnt that he had not been selected, he felt very much upset. Mr. Jayant Shah (Witness No. 95) told us that he had a talk with Dr. Shah on the telephone on the night of the 1st May, and Dr. Shah had informed him about the result of the interview which had taken place that day. Mr. Jayant Shah told us that from his conversation with his brother, Dr. Shah, it appeared that the latter had reconciled himself to his non-selection to the post of professor Agronomy.

7.5. Both Mrs. Shah and Dr. Patel told us that Dr. Shah had met Dr. Swaminathan on the 3rd May, 1972 to ventilate his grievance about his non-selection as a Professor of Agronomy. Dr. Swaminathan's note recorded on 21-5-72, however, shows that Dr. Shah had met him on the 2nd May and not on the 3rd

May. From the evidence of Mrs. Shah and Dr. Patel it further appears that Mrs. Shah stopped taking any food from the evening of 3rd May, 1972, and despite entreaties by Mrs. Shah and Dr. Shah's children, he did not take any food until the night of the 4th May. Some time on the night of 4th May, 1972, while the members of his family were asleep, Dr. Shah committed suicide. That, in brief, is the substance of the evidence in regard to the events that took place on the fateful day of Dr. Shah's suicide.

Appointment of Dr. De and Dr. Prasad

7.6. In para. 2 of his letter, Dr. Shah refers to the irregularities in the appointments of scientists to higher posts. Dr. Shah's allegation is that persons not qualified in a particular discipline are appointed in that discipline; during certain selections, while considering the scientists from the same Division for higher positions, seniority is taken into account, and at certain other times qualifications are taken into account. Thus his complaint is that no consistent policy is followed in selecting persons for higher positions from the same institute. He specifically refers to the appointment of Dr. De and Dr. Prasad.

7.7. Several such allegations have been made by many scientists of the ICAR who met the Committee and who gave answer to the Questionnaire. This is a general complaint which needs serious consideration. A scientist should be selected entirely on the basis of merit irrespective of seniority and other considerations. It is not uncommon to find a junior man better than his senior in talent. So we do not believe that seniority should by itself be decisive or a major criterion for selection to a higher post. However, if a junior and a senior are found equally competent by the Selection Committee, in such a case the senior person should be given preference over the junior person. Except for this proviso, merit alone should be considered for selection to a post. We give below our views about the appointment of Dr. De as Head of the Division of Agronomy and of Dr. Rajendra Prasad as Professor of Agronomy.

Appointment of Dr. Rajat De as Head of the Division of Agronomy Indian Agricultural Research Institute, New Delhi, in the grade of Rs.1300—1600

7.8. The appointment of Dr. Rajat De as Head of the Division of Agronomy, IARI, on 9-9-71 has been a subject matter of controversy. Apart from various representations made at the time of the interview to the post and after the appointment was made by individuals and Members of Parliament, the case has been specifically referred to by Dr. V.H. Shah in his letter dated 4-5-72 addressed to the Director-General, Indian Council of Agricultural Research. The regular appointment was preceded by an *ad hoc* appointment on 1-6-71 in favour of Dr. De Probably apprehending this Dr. Dastane had represented to the D.G., ICAR on 29-5-71 enclosing a copy of the Order dated 26-5-71 issued by the Director, IARI, appointing him to hold the current charge of the post of the Head of Division, until Dr. I.C. Mahapatra returned from leave. This was followed by another representation by him on 3-6-71. Subsequently, on 26-6-71, the Director, IARI, forwarded to the Secretary, ICAR, two representations from Drs. Dastane and Mahapatra against this *ad hoc* appointment. One M.P. wrote to the Ministry of Agriculture on 22-7-71 on the subject. Yet another M.P. wrote to the Director-General, ICAR, on 25-8-71 which raised the issue about non-fulfilment of qualifications by Dr. De. Finally, Dr. Mahapatra and one M.P. represented to the Ministry of Agriculture after the selection had taken place.

7.9. The post of the Head of the Division of Agronomy IARI, fell vacant on 10-5-71 due to the demise of Dr. S.S.Bains who was holding this post. The post was advertised with the following qualifications:

A. Essential

(*i*) Doctorate in Agronomy relaxable to M.Sc. degree or equivalent post-graduate qualifications in the case of candidates with exceptionally distinguished record of productive research.

(*ii*) Ten years' experience in Agronomy as evidenced by published work.

(*iii*) Ability to plan, organise and guide research in Agronomy.

B. Desirable

(*i*) Experience of research administration.

(*ii*) Teaching experience preferably at post-graduate level.

(*iii*) Knowledge of French/German/Russian.

(*iv*) Knowledge of modern methods of techniques applicable to Agronomy.

The interview for the post was held on 8-9-1971 and the orders appointing Dr. De were issued on 9-9-1971.

7.10. Certain statements and allegations have been made in regard to the selection of Dr. De of which the principal points may be summarised as follows:

1. Dr. De has been favoured continuously by first giving him an *ad hoc* appointment as Professor of Agronomy in the grade of Rs.1100–1600 on 27-12-69, and, then by giving him *ad hoc* appointment as Head of the Division in the grade of Rs.1300-1600 from 1-6-71, though he was junior to two scientists. This gave him advantage over the other candidates.
2. "Dr. De did not possess any basic degree in Agronomy at any stage, *i.e.*, B.Sc., M.Sc. or Ph.D. which was one of the essential qualifications prescribed by the advertisement for the post."

The position regarding each of the above issues has been examined in detail with the help of documents and evidence produced before the Committee. Our comments in this regard are as follows:—

7.11. **1(a) Ad hoc appointment of Dr. De as Professor of Agronomy**

It may be recalled that the grade of Professors in the IARI was revised from Rs. 900–1250 to Rs. 1100–1600 in June 1969, but the Ministry of Finance while agreeing to this revision stipulated that this grade should be given only to such existing incumbents as had already been confirmed in the grade of Rs.900-1250 and been found suitable for the higher grade by a screening committee. All other posts would be advertised to attract talent and the existing incumbents would be considered afresh along with other candidates. In December, 1969, the Ministry of Finance agreed to give this grade (Rs. 1100-1600) in an *ad hoc* manner to three other Professors from 27-12-69, who had been adjudged suitable by the screening committee, but had not been confirmed due to various reasons. So far as Dr. De was concerned he had not been confirmed in the earlier grade of Rs. 900-1250 because Dr. Bains had been holding lien on this post. Consequent on the death of Dr. Bains, this lien was vacated and Dr. De was confirmed on this post from 14-5-71 though the orders were issued on 22-6-1971. It was thereafter on 7-7-71 that Dr. De was appointed, along with two other Professors, in the revised grade of Rs. 1100-1600. This appointment therefore was regular and did not constitute the conferment of any special favour on Dr. De.

7.12. **1(b) Ad hoc appointment of Dr. De as Head of the Division of Agronomy**

Dr. Bains, Head of the Division of Agronomy, IARI, died suddenly on 11-5-71. On 12-5-71 the question of making *ad hoc* arrangements to fill up the post was considered in the IARI on the personal file of Dr. Rajat De (F. No. 17-96/65-Ad. II-P.17/N). The notings, which speak for themselves, are reproduced below:

"As per verbal instructions of the CAO-R, draft 0.0 authorising Dr. Rajat De, Professor of Agronomy, to hold current charge of the post of Head of the Division of Agronomy w.e.f. 11-5-1971

(F.N.) in addition to his own duties during leave of absence of Dr. Mahapatra, consequent on the sad demise of Dr. S.S. Baina is placed below for approval.

D.F.A.
12-5-71

Discussed with Dy. R. & Dir. The correction is to give the addl. charge to Co-ord, in the D.O.

Sd/- G.K. Kasbekar, CAO
12-5-71

Pl. put up papers reg. Dr. Mahapatra's leave before submitting papers to Dir.

The relevant file of Accs. is linked below. Dr. Mahapatra is on 32 days leave from 11-5-71 *i.e.* upto 12-6-71.

Sd/- L.P.S.
13-5-71

While we have been following the convention of requesting the P.C. to look after the duties of the Head whenever the Head is on leave or on deputation abroad, in the present situation it may be difficult for the P.C. to do justice to two jobs for several months. Hence, we may send immediately a proposal for the *ad hoc* appointment of Dr. De as Head, Agronomy until the post is filled up on a regular basis.

Sd/- M.S. Swaminathan
Director
13-5-71"

7.13. In pursuance of this decision, an order No. 17-96/65-Ad.II, dated 12-5-71 was issued by the Chief Administrative Officer of the IARI asking Dr. Rajat De to hold the current charge of the post during the leave of absence of Dr. Mahapatra, Project Co-ordinator. On this crucial date, Dr. N.G. Dastane, who was next to Dr. Mahapatra in seniority was away from India for a U.N./F.A.O. Conference at Beirut. Dr. Dastane returned from abroad (and joined the post of Co-ordinator on 19-5-71 which made him senior to Dr. De since this post was in the higher grade). An other Order No. 18-60/66-Ad.II, dated 26th May, 1971 was issued by the Chief Administrative Officer, IARI, asking Dr. Dastane to hold the current charge of the post of the Head of the Division until the return of Dr. Mahapatra. The Director, IARI, sent the proposal to appoint Dr. De as Head of the Division *vide* his D.O. No. 18-60/66-Ad.II, dated 22-5-1971. It is not clear from the notings of the IARI file, quoted above, as to why it was thought necessary to issue the second order dated 26-5-71 appointing Dr. Dastane when a proposal in writing had already been sent on 22-5-1971 by the Director, IARI, to the D.G., ICAR, for appointing Dr. De to this post in an *ad hoc* capacity.

7.14. The proposal of the Director, IARI, was considered by the ICAR and with the approval of Minister of Agriculture it was decided to appoint Dr. De as *ad hoc* Head of the Division.

Director, IARI, in his communication to the ICAR had advanced the following arguments in favour of appointing Dr. De:—

1. In spite of the convention of requesting the Project Co-ordinator to look after the duties of the Head, it would be difficult for the Project Co-ordinator to do justice to two jobs for several months.

2. Dr. Mahapatra and Dr. Dastane were already holding the posts of Co-ordinator in the pay scale of Rs.1300–1600 and as such Dr. Rajat De, who was presently officiating as Professor on *ad hoc* basis in the grade of Rs.1100–1600, was the senior-most officer in the Division of Agronomy.

3. In order that Dr. Mahapatra and Dr. Dastane were not put to any financial handicap as a result of this interim arrangement, the teaching allowance of Rs.150 paid to the Head need not be paid to Dr. De.

4. The Secretary, ICAR, in his note dated 25-7-1971, advanced the additional argument that the performance of Dr. De in the interview held for the post of Head of the Division of Agronomy in 1966 was outstanding and he had been placed at No.2 after Dr. S. S. Bains by the selection committee.

7.15. From the above statement of facts, the following issues clearly emerge :—

1. Drs. Mahapatra and Dastane were senior to Dr. De.

2. The accepted convention in the IARI had been to ask the project Co-ordinator to look after the work of the Head of the Division whenever the latter was away.

3. The post of Head of the Division carried a special pay of Rs. 150 as teaching allowance and also carried more status since the Head was in charge of the Division and as such was a little above the project Co-ordinators in administrative matters.

4. The Project Co-ordinators themselves were eager to take up this appointment and probably, there was an apprehension that any *ad hoc* status to Dr. De would prejudice the chances of other candidates in the regular selection to the post.

7.16. The arguments put forth by the Director, IARI, do not carry conviction in view of the factors stated above, particularly when the Project Co-ordinators were eager that their seniority should not be ignored and the Director, IARI, in his orders issued on 12-5-71 and 26-5-71 had conceded their right to hold the *ad hoc* appointment by virtue of their seniority. Dr. Mahapatra who was on leave and had actually written to the Director, IARI, offering to cut down his leave and return in case his services were required. In his reply, the Director, IARI, wrote to Dr. Mahapatra that he should avail of his full leave and join after its expiry. In a note dated 9-9-71, the Secretary (Agri.) had recorded the following minute :—

"I wish the Director's written orders were in conformity with the views against combining charges or disturbing the project Co-ordinators."

7.17. The reference made in the notings on the file regarding the fact that Dr. De had been placed at No. 2 in the panel prepared by the selection committee constituted in making selection to the post of Head of the Division of Agronomy in 1966 has not only been quoted out of context but the Secretary ICAR in his note dated 19-8-71 recorded on page 7 of F. 38-18/71-Instt. I, has gone of out his way in mentioning facts about the proceedings which do not appear in its record. The Secretary ICAR has stated as follows :-

"In the open competition Dr. Bains was selected by a duly constituted Selection Committee consisting of very eminent scientists. I was myself present as Member-Secretary of this Committee. Dr. De was placed No. 2 by the Selection Committee. In fact, the Committee members felt that both Dr. Bains and Dr. De were outstanding candidates for this post and it was a very difficult choice before them as to who should be placed No. 1. Taking into consideration all the factors and the fact that Dr. Bains was the senior person out of the two, he was placed No. 1 and Dr. De No. 2".

7.18. It is a matter of deep regret that the Secretary of the ICAR should have made such an elaborate note entirely in fovour of Dr. De though the contemporaneous record of the proceedings of the selection

committee do not bear out any of these statements. It is thus clear that the Secretary has expressed his impressions about the proceedings of the Committee as to the scientific merits of the candidates on the basis of his memory.

7.19. The policy followed by the ICAR in making *ad hoc* appointments was that, as far as possible, they should be avoided. The Committee was told that in the case of *ad hoc* appointments to the post of Heads of Divisions, ICAR itself had taken the stand that it would not be proper to appoint Heads in *ad hoc* manner. Thus the appointment of Dr. De as *ad hoc* Head of the Division of Agronomy IARI, gave rise to the apprehension that he was being favoured and groomed for ultimate selection as Head of the Division.

Did Dr. De possess the basic qualifications prescribed for the post of the Head of the Division of Agronomy?

7.20. The main question, which we have to consider in dealing with the complaint of Dr. Shah against the appointment of Dr. De as Head of the Division of Agronomy, resolves round the point as to whether Dr. De possessed the basic qualifications as prescribed by the relevant advertisement. We have already cited *in extenso* the advertisement, issued by the ICAR on 10th May, 1971, in which the essential and desirable qualifications for the post in question were elaborately set out. Reverting to that advertisement, we must emphasise the fact that the essential qualifications prescribed by sub-clause (i), (ii) and (iii) of clause (A) of the advertisement are obviously cumulative and the candidates concerned had to satisfy each one of them. Sub-clauses (i) to (iv) of clause (B) of the advertisement prescribed desirable qualifications. It would thus be clear that no person could be appointed to the post unless he satisfied the essential qualifications prescribed by sub-clauses (i) to (iii) of Clause (A).

7.21. It is in the light of this position that we must consider the academic qualifications of Dr. De. Dr. De passed his B.Sc. from Lucknow University in 1946 with Botany, Zoology and Chemistry . He then joined the course of M.Sc. in agriculture in Banaras Hindu University which included Crop Physiology as its specialisation. Subsequently , he did his Ph.D. at the same University in Crop Physiology in 1952.

7.22. Before we address ourselves to the question about Dr. De's eligibility to be called for an interview, we must refer to one fact which, *prima facie*, is in his favour. It appears that in 1960, the UPSC had advertised a post of an Agronomist (Plant Tissue Tests) and the qualifications prescribed by the said advertisement were as follows :—

Essential :(*i*) M.Sc. in Agriculture or in Botany with Plant Physiology as a major subject of a recognised University.

Or

Associationship of Indian Agricultural Research Institute in Agronomy or Plant Physiology.

(*ii*) About 7 years' experience of research on agronomical problems connected with fertiliser or crops, preferably on plant tissue tests and spray fertilisation, as evidenced by published papers.

Qualifications relaxable at Commission's discretion in case of candidates otherwise well-qualified.

Desirable : (*i*) Doctorate in Agronomy.

(*ii*) Knowledge of French/German.

The duties attached to the post were to conduct experiments on Plant Tissue tests and spary fertilisation investigations.

7.23. At that time, appointments of scientists at the IARI were made on the basis of the selections by the UPSC. The UPSC appointed a Selection Committee and for the post of Agronomist (Plant Tissue Tests), Dr. De was selected and consequently appointed. Thereafter, he worked as Agronomist for 10 years. *Prima facie*, it may appear that if Dr. De had worked as an Agronomist for 10 years in IARI, he should be regarded as eligible to be called for the interview for the post of the Head of the Division of Agronomy at IARI. The point to be noted, however, is that this does not affect the fact that the requirements for the post of Agronomist (Plant Tissue Tests) as advertised were qualitatively and radically different from the requirements of the post of the Head of the Division of Agronomy. One has merely to compare and contrast the essential qualifications prescribed in the two respective advertisements to be satisfied on this point.

7.24. Whereas, for the post of an Agronomist (Plant Tissue Tests) the advertisement, issued by the UPSC in 1960, required *inter alia*, that the candidate should be M.Sc. in Agriculture or Botany with Plant Physiology as a major subject of a recognised University, the essential qualifications prescribed by the advertisement for the post of the Head of the Division of Agronomy was, *inter alia*, doctorate in Agronomy (relaxable to M.Sc. or equivalent post-graduate qualifications in the case of a candidate with exceptionally distinguished record of productive research).

It is common ground—and if one examines Dr. De's academic qualifications—there is obviously no doubt—that Dr. De did not satisfy the essential requirements prescribed by sub-clause (i) of clause (A) of the advertisement issued on 10th May 1971. He did not have even the B.Sc. Degree in Agriculture and his M.Sc. degree in Agriculture from the Banaras Hindu University included Crop Physiology and its specialisation, and not Agronomy. Similarly, his Ph.D. from the same University was in respect of Crop Physiology and not Agronomy. This position has not been and cannot be disputed. Therefore, the answer to the question which we have posed at the outset as to whether Dr. De possessed the basic qualifications prescribed for the post of the Head of the Division of Agronomy must be in the negative.

7.25. There is, however, one factor which may be regarded as relevant and to which we must refer. The post of the Head of the Division of Agronomy was advertised in 1966 and the qualifications for the post then prescribed were substantially similar to those prescribed in 1971, and yet Dr. De was called for the interview at the meeting of the Selection Committee which chose the Head of the Division of Agronomy. The choice fell on Dr. Bains.

7.26. There is, however, a somewhat interesting, if not intriguing, noting in regard to the question as to whether Dr. De should be called for the interview at all. The file in relation to the appointment of Dr. Bains in 1966 discloses a noting made by Dr. J. S. Kanwar, Deputy Director-General on this point on 19-9-66 on file No. 5-6-/66/Sectt. I (P.5/N). In this noting Dr. Kanwar observed that Dr. Rajat De did not possess Ph.D. in Agronomy, but his research experience and publications were quite impressive and he might be called for interview if there was no technical hitch. The last statement in the note strikes us as ambivalent and we are inclined to draw the inference that, by this ambivalent statement, Dr. Kanwar, in substance, avoided to face the main issue as to whether Dr. De should be called for interview in view of his own findings that he did not satisfy one of the basic qualifications prescribed by the advertisement.

7.27. It is significant that on this occasion, Dr. M. S. Swaminathan, who was the Director of the IARI, had also made a note on 19-9-66 on the same file on Page 6/N, and in this note Dr. Swaminathan mentioned names of the candidates who should be called for the interview, but did not include Dr. De's name in that list. It would not be unreasonable to infer that Dr. Swaminathan took the view that Dr. De did not at that time satisfy the essential qualifications prescribed for the post and so he did not include his name in the list of the persons who should be called for interview. We are inclined to attach considerable importance to Dr. Swaminathan's note. Despite Dr. Kanwar's note and the omission of

Dr. De's name from Dr. Swaminathan's list, the Director-General, Dr. B. P. Pal, ordered that Dr. De should be called for interview.

7.28. In retrospect, it would be permissible to observe that it must have been anticipated in 1966, that to call Dr. De for the interview for the post of the Head of the Division of Agronomy, notwithstanding the fact that he did not possess the essential qualifications of the post may, in future, help him and it does appear that it did help him because in 1971, when a vacancy occurred, he was called for the interview and, in fact, appointed. The Secretary, ICAR, also cited this selection while supporting the case of Dr. De for *ad hoc* appointment to this post.

7.29. We had requested the Panel of Advisers to consider the question about the eligibility of Dr. De to be called for the interview for the post in question, on the basis of the advertisement published by the ICAR in that behalf. We had also intimated to the Panel that Dr. De had been appointed as Agronomist (Plant Tissue Tests) and had worked as such for 10 years at the IARI and we requested them to consider whether that would make Dr. De eligible to be called for the interview for the post under the terms prescribed in the relevant advertisement. The Report of the Panel shows that the Panel considered the eligibility of Dr. De solely in the light of the fact that he had worked as an Agronomist for 10 years. Considering the matter on this basis, they were unable to come to a unanimous decision. Two members of the Panel, Dr. Patel and vice-Chancellor, Dr. Negi, held that Dr. De was not eligible, whereas the Chairman, Dr. Dandekar and another member of the Panel, Dr. Rao, came to a contrary conclusion.

7.30. Another question was also referred to the Panel "whether in other universities and countries, pure plant physiologists, soil chemists and plant breeders are appointed to the highest positions in Agronomy Division". On this question, the Panel have expressed a unanimous view. "We are aware that such appointments are made in the foreign universities though, of course, in exceptional cases and with sufficient justification. As far as we are aware, such appointments are not made in the Agricultural Universities in India."

7.31. Apart from this aspect of the matter, however, it seems to us clear that on the terms of the advertisement, Dr. De did not possess the basic qualifications prescribed by clause (A).

7.32. It seems to us that if, in spite of the essential qualifications prescribed by clause (A) in the advertisement, it was intended by the ICAR to relax those qualifications and consider the claims of scientists who possessed qualifications like those of Dr. De, they should have clearly so indicated in the advertisement itself, or if that stage had passed, they should have postponed the interview and issued a revised advertisement. Since this has not been done, it would be legitimate to criticise the procedure actually followed as having been unfair to those scientists who would have applied had they known that the basic qualifications as stood in the advertisement would be eventually relaxed in this manner. It would not be far-fetched or unreasonable to assume that as a result of the essential qualifications prescribed without any indication that the Selection Committee might relax any of them, some scientists, who possessed qualifications like those of Dr. De, might also be considered for interview and even appointment, might have precluded them from applying for the post, and this consideration, in our view, constitutes an unfortunate feature associated with the appointment of Dr. Rajat De.

7.33. There is another consideration to which we ought to refer in dealing with the question as to whether Dr. De's appointment as Head of the Division of Agronomy was not open to serious objection. We have already referred to the essential qualifications prescribed in the advertisement published for the post and have indicated Dr. De's academic qualifications. In this connection it is important to bear in mind that at the IARI there are different branches of Agronomy, Physiology and Soil Science. In other

words, in organising the general Division of Agronomy, IARI have distinguished between agronomy in the narrow sense of the word and physiology and Soil Science. This makes the essential qualifications prescribed by the advertisement most significant and that corroborates the conclusion that Dr. De was not eligible for being called for the interview for the post of Head of the Division of Agronomy much less for the appointment.

7.34. We would also like to make some observations regarding the manner in which selection to this post was rushed through. Interview for the post of Head of the Division of Agronomy was held on 8-9-71. Some senior scientists of the IARI had approached the Secretary (Agri.) on 30-8-71 and one of the points which they raised before him was that Dr. De did not possess M.Sc. or Ph.D. degree in Agronomy. Secretary (Agr.) in his minute recorded on 30th August, 1971 suggested to Secretary, ICAR, that in order to avoid future complications, all the doubtful points he set at rest before holding the interview. The interview was to be held on 8-9-71 and the position was explained by the D.G., ICAR, on 7-9-71 in his note to Secretary (Agri.) which was seen by him on 9-9-71. The Minister for Agriculture in another minute, recorded on 18-9-71, stated as follows :

> "I have received one more copy of similar representations before the interview. I had called for the file. I am surprised that before those representations were disposed of, the selection has been finalised."

7.35. It is surprising that the letter of appointment was issued to him on the same day, which though not unusual, does tend to lend support to the apprehension that the matter was being dealt with at the top speed. Shri T. P. Singh in his deposition before the Committtee reasserted his dissatisfaction with the manner in which the appointment was rushed through.

7.36. In the light of all the relevant facts to which the Committee has given its anxious consideration the Committee has come to the conclusion that there are some aspects pertaining to the appointment of Dr. De as Head of the Division of Agronomy which must be regarded as unsatisfactory and as therefore casting doubts on the propriety of this appointment. The Committee, therefore, concludes that the appointment of Dr. De as Head of the Division of Agronomy was not properly made.

Selection of Dr. Rajendra Prasad as Professor of Agronomy at the Post-Graduate School, IARI (Division of Agronomy) Rs. 1100—1600.

7.37. The selection committee for this post met on 1-5-72, with an outside expert nominated as Chairman by the President of the ICAR, two outside experts and two representatives of the ICAR. The Committee interviewed 12 candidates, including Dr. V. H. Shah.

After carefully considering the qualifications, experience and capabilities of all the candidates and also taking into consideration the requirements of the job, the committee, came to the conclusion that the following three candidates are suitable for the post and recommended them in the order of preference as mentioned below:—

1. Dr. Rajendra Prasad.
2. Dr. V. H. Shah.
3. Dr. S. K. Mukhopadhyay.

7.38. Before the offer of appointment to Dr. Rajendra Prasad could be issued, Dr. V. H. Shah had committed suicide on 5th May, 1972. In the discussions which followed in the Parliament on Dr. Shah's suicide, this appointment was criticised by Members of Parliament. Dr. Shah in his letter dated 5-5-72 to the D.G., ICAR had also commented that Dr. Prasad had been selected as Professor of

Agronomy though he had qualifications in Plant Physiology and Soil Sciences. In a letter dated 27-7-72, the D.G., ICAR, wrote to the Chairman, ICAR Inquiry Committee requesting him to examine the appointment of Dr. Prasad at an early date since the Minister of Agriculture had stayed the issue of appointment offer to him pending consideration by the Committee of this case. This letter was considered by the Committee in its meeting held on 19-8-72. The Committee took the view that the case of Dr. Rajendra Prasad should be considered along with all other cases after the evidence was fully recorded. It would not be appropriate or reasonable to make an interim report on this case without considering all relevant questions which are the subject-matter of the inquiry. This reply was duly communicated to the D.G., ICAR, on 21-8-72.

7.39. We have looked into the bio-data of the 3 candidates, keeping in view the qualifications prescribed for this post. Dr. Rajendra Prasad fulfilled the qualifications prescribed for the post. The research and teaching experience gained by him and the research publications standing to his credit were adequate to make him eminently suitable for the job. We, therefore, feel that, on the record, we see no justification for doubting the correctness or validity of the decision of the selection committee in favour of Dr. Prasad.

7.40. A reference has been made to the proceedings of the selection committee for appointment to the post of Senior Agronomist and Associate Project Coordinator, IARI, which had met on 10-8-70 and in which both Dr. Prasad and Dr. Shah were found suitable. The selection committee, while finding Dr. Prasad as an outstanding candidate so far as general agronomy was concerned, had, however, recommended Dr. Shah for this post. We have gone into the proceedings and we find that this verdict in favour of Dr. Shah was because of his experience in the field of research on maize. It would, therefore, be unfair to conclude that this selection committee had found Dr. Prasad as inferior to Dr. Shah; on the other hand, the Committee's observations about Dr. Prasad in this report lend support to his subsequent appointment as Professor of Agronomy.

7.41. Another feature of the selection which has been criticised is the fact that Dr. Rajat De, Head of the Division of Agronomy, IARI, was one of the members of the selection committee, though usually the Director, IARI, himself used to represent the Institute. According to Bye-law No. 41 of the ICAR, the Director, or his nominee, could be a member of the selection committee in the case of the IARI. It appears that on this particular date, the Director, IARI, was on leave and thus could not attend the meeting of the selection committee and instead nominated the Head of the Division of Agronomy to represent him. An analysis has also been made of representation of the Institute in the selection committees to recruitment to posts of Professors in the Institute held during this period. In all, recruitment has been held to 15 posts of Professors. Out of these, Heads of Divisions have been members of selection committees in three cases when the Director, IARI, or the D.G., ICAR, happened to be the Chairman of the selection committee. Out of the remaining cases, only in one case the Head of the Division has represented the Director, and in all these cases Chairman was an outside expert nominated by the Minister. Though, as we have already indicated Dr. De's appointment as Head is open to objection, his presence in the Committee which selected Dr. Prasad though in a sense unfortunate, cannot by itself be said to and does not affect the propriety of the selection of Dr. Prasad by the Committee.

Paragraphs 6 and 7 of Dr. Shah's letter

7.42. In these two paragraphs, Dr. Shah makes three allegations:

(*i*) in relay cropping very large sized seed potato was used to show high yields;

(*ii*) so much publicised Baisakhi Moong did not prove successful in National Demonstration;

(*iii*) so much praised work with slow release of N. Fert, or nitrification inhibitors did not find experimental validity anywhere else in the country.

7.43. The Committee appointed a Panel of Advisers to analyse the data not only in respect of the above three claims of the I.C.A.R., but also on the following four claims;

(*i*) a new strain of maize with its protein content doubled and having nutritious value like milk;

(*ii*) Sharbati Sonora wheat having protein and lysine contents comparable to milk;

(*iii*) a new seed of bajra that yields 32 maunds per acre;

(*iv*) a variety of Sabarmati rice which was having a real flavour and was very good in cooking.

7.44. The Panel of Advisers analysed the data obtained from the Ministry of Agriculture, ICAR, IARI., various Institutes under the ICAR and various State Governments. The Panel also visited certain laboratories of IARI, talked to the scientists concerned regarding certain experimental procedures and also received data from scientists who had knowledge on the above matters. The full report of the Panel is given in Appendix IX. Our conclusions based on the report of the Panel are given below serially.

Use of large sized potato to show high yields

7.45. This allegation of Dr. Shah was about the experiments carried out in IARI in relay cropping. Three varieties of potatoes, Kufri Chandramukhi, Kufri Alankar and Kufri Chamatkar were released by the Central Variety Release Committee (CVRC) in 1967 and 1968. They were developed by the breeders in C.P.R.I., Simla, and were used as one of the crops in relay cropping in November-December as it is a short duration crop. They produce large tubers, about 50 gm. in weight, which are used as seed. Its average yield was claimed as 222 quintals/hectare by IARI scientists. The Panel has observed as follows on the records maintained in the IARI in connection with these experiments:

"We were able to obtain from the Director, IARI the Field Note Books on these experiments. We regret to say that the field records in these books are extremely unsystematic and that the books are more in the nature of scribbling pads. The physical condition in which they are preserved is also not good. The yields recorded in these books broadly tally with those published in the above mentioned publication; but the difference though negligible, is nowhere explained. Regarding the size and quantity of seed used, we could locate only one entry in the Note Book for the year 1969-70. It indicates that 15 quintals/hectare seed of kufri Alankar was planted. The experiments were conducted presumably on 1/46 hectare plots. The note book does not record the actual quantity of seed used in the specific experiments. We consider this quite unsatisfactory manner of recording of experimental data."

7.46. In conclusion, the Panel observes:

(*a*) it is possible that slightly large-sized potato seed was used in the IARI experiments. However, it seems likely that this was not because of deliberate selection but because of the circumstance that the particular varieties produce normally rather large sized tubers.

(*b*) On the basis of information available to us, the quantum of seed per hectare used in the IARI experiments does not appear to be excessive.

(*c*) If, in fact, very large sized seed was used in the IARI experiments, it is not reflected in exceptionally high yields; the yields obtained in the IARI experiments have been corroborated by the National Demonstrations in U.P. and experience of the farmers in Punjab.

(*d*) It is essential to maintain a complete and detailed record of experimental work including its design, particulars of materials and treatments used such as varieties, seed rates, spacing, fertiliser doses, etc. in a systematic manner preferably in a separate project file for each experimental series. Such records should be duly signed by the Scientist in charge of the project.

"Therefore, on the strength of the evidence before us, we do not think that Dr. Shah's allegation that 'in relay-cropping a very large-sized potato seed was used to show yields' can be sustained."

We endorse the observation of the Advisers on this allegation.

Baisakhi Moong

7.47. Baisakhi Moong is a variety of short duration pulse developed from type 44 Moong of U.P. Institute of Agricultural Research, Kanpur by Dr. L.M. Jaswani. It was released in 1971. It is grown in May-June as one of the relay crops. Its harvesting period is shorter than other pulses. Its average Yield in IARI experiments was claimed as 10.4 quintals/hectare.

7.48. The Panel observes:

"Thus, it seems that the results of Baisakhi Moong in experiments conducted in IARI and Pantnagar did not prove in the National Demonstrations, except in Maharashtra and Andhra Pradesh, and also in the farmers' fields."

"Hence, there appears to be some substance in Dr. Shah's allegations that the Baisakhi Moong did not prove successful in National Demonstration. It must be a common experience that some experimental results do not prove in the fields; that indeed is the reason for conducting National Demonstrations. Under the circumstances, it seems that further experimental and demonstration work was necessary before the varieties were released. However, we note that Baisakhi Moong was recommended as a short duration summer crop on fields which might otherwise have remained fallow."

We agree with the views of the Advisers.

N. Fert, or Nitrification inhibitors

7.49. These inhibitors when applied to soil, increase the uptake of nitrogen by plants. This work was done by Dr. Rajendra Prasad of the Agronomy Division who is reported to have been selected in preference to late Dr. Shah as Professor of Agronomy on May 1, 1972 after which Dr. Shah committed suicide. Several experiments have been carried out using these inhibitors under All India Coordinated Projects at Kharagpur, Kalyani, Indore and Maharashtra. In all the experiments, the yield of the grain is higher though there is much variation in the yield.

7.50. The Panel observes:

"Dr. Shah's allegation that the work "did not find experimental validity anywhere else in the country" cannot therefore be sustained. Moreover, it seems that work is still in its exploratory stages."

We agree with the conclusions of the Advisers.

A new strain of maize

7.51. The Panel has made the following observation on this matter:

> "It is obvious therefore that there has been a certain confusion in public mind regarding the claims of the high-lysine maize because of a failure to see the difference between protein content and lysine content. In this, the scientists of the ICAR are not entirely free of blame. The subject also appears to be somewhat over-advertised."

We agree with these observations of the Panel.

7.52. In our view, experiments on nutritional value of the maize should have been done by competent nutritionists. Proper controls were not taken. We suggest that the nutrition value of any seed should be tested in a Nutrition Laboratory or by competent nutritionists.

Sharbati Sonora wheat

7.53. This new variety of wheat was produced by x-ray irradiation by Dr. M.S. Swaminathan and Dr. Verghese from Sonora-64 which was obtained from Mexico. It was released in 1967 by CVRC. It is amber in colour as compared to Sonora-64 which is red. It has been claimed that it has higher protein and lysine contents as compared to its parent variety, Sonora-64. The analysis of protein and lysine contents were made in the genetics laboratory of IARI by Dr. Austin. After the claim was made that the lysine content of Sharbati Sonora is higher than that of Sonora-64, various laboratories in the world repeated this analysis. The C.Y.M.M.A.T. in Mexico, which is the International Maize and Wheat Improvement Centre, grew this wheat in Mexico and found that it did not have higher lysine content as compared to Sonora-64. This fact was brought to the notice of the agricultural scientists at the All India Wheat Workshop held at Indore in August, 1969. It was then resolved in this meeting that the lysine content should be verified in the National Institute of Nutrition, Hyderabad, and Nutrition Research laboratory, Mysore. It is very surprising and indeed regretable that no wheat of this variety was sent during the past three years to these laboratories for analysis. On the advice of the Panel of Advisers, we then obtained Sharbati Sonora from the Director of IARI and sent it to these two laboratories and also to the Department of Bio-chemistry, Indian Institute of Science, Bangalore, for the analysis of lysine content. The data from these three laboratories which were received within about three weeks are as follows:

	gm. lysine/100 g protein	g/100g wheat (undried)
Hyderabad	2.48	0.373
Mysore	2.99	0.45
Bangalore	3.17	0.478

7.54. The Panel observes as follows:

> "Thus, the results received from the Hyderabad Institute are in conformity with several other results earlier quoted. The results are somewhat higher but no where near 4.61 per cent as mentioned by Dr. M.S. Swaminathan."

7.55. "To conclude, it is obvious that the protein content of wheat, as probably of other cereals is highly variable depending upon the soil-climatic conditions and also the fertilizers used. The variation is well-reflected in the published results. However, in spite of the variation, Sharbati Sonora seems to be clearly superior to Sonora-64 and Kalyan Sona in respect of protein content but probably not in lysine content. Evidently, the lysine content of Sharbati Sonora could not be as high as that of milk."

We agree with the conclusions of the Panel.

New seed of Bajra that yields 32 maunds/acre

7.56. The ICAR was requested to supply available data on bajra. Four varieties were released during 1966—68 from different places. The data supplied are mostly from Punjab were a consistent and significant increase in the yield has been reported.

7.57. The Panel reports that the data supplied by the ICAR are rather old (1964-65) and refer to a seed developed about a decade ago. On the basis of the available evidence they conclude:

> "..... Hybrid Bajra No.1 is clearly a superior variety and the claim of 32 maunds per acre does not appear to be an exaggerated claim. However, whether the reference was to Hybrid Bajra No.1 or some other variety is not clear."

We agree with the views of the Advisers.

Sabarmati rice

7.58. This variety of rice was developed from IR-8 and was released in 1970. Several reports mention that this variety is a distinctly superior one as far as yield and flavour are concerned. Thus, the allegation made in respect of the claim about this rice is not correct.

Hasty Release of New Varieties of Seeds

7.59. The Panel of Advisers looked into the possibility of release of new varieties of seeds by Central Variety Release Committee without proper testing. The present procedure provides for several stages including trials in All India Coordinated Projects, National Demonstrations and discussions in Workshops. In the opinion of the Panel, the procedure is satisfactory if it is properly followed. They have, however, suggested that in the pro forma of the Central Variety Release Committee for the release of new variety of seeds, a column should be added which should state the negative points of the variety. We realise that a new variety of seed with higher yield, and other good qualities are of great benefit to the country. However, it should be released after intensive examination. The performance of the seed should be watched continually, and if any harmful effects are observed, immediate steps should be taken to withdraw the variety. The Achievement Audit Committee for IARI (1972) has also recommended strict control on the release of new varieties of seeds.

Premature Publicity

7.60. While the inquiry was in progress, leading newspapers of the Capital and the All India Radio reported about some multiple cropping patterns developed in the IARI which could provide jobs for 17.5 million people. In order to verify the authenticity of this claim, we sought detailed information in this regard from the Director General, ICAR. The Director-General, ICAR wrote to us saying that the reports were not based on any direct press releases by the ICAR. This report appears to be based on the article "Multiple Cropping in Rural Development" published in a research bulletin

"Recent Research on Multiple Cropping" published by IARI in 1972. This article has been written by Dr. S.L. Chowdhuri, Project Coordinator. In the course of his statement before the Committee, the D.G., also added that no constraints were placed on the publication of science papers in the Institutes' Journal as they are intended to provoke discussion on the subject.

7.61. On page 120 of this publication it is mentioned that 17.5 million people can find employment if multiple cropping is introduced in the fields. This information also appeared in September 1, 1972 (p. 9) issue of 'Nature', a journal published from London. The data given are not based on any extensive experimental work carried out in the country. The data have been taken from experiments carried out only in IARI. Hence such an announcement on the radio and in newspapers based on insufficient data only gives false hopes to the people of the country. We suggest, therefore, that before such data are publicised, their applicability should be thoroughly checked. We feel that the press also has a responsibility in this regard. It should publish such news only when its validity has been scientifically checked and proved by the organisation concerned.

Unsatisfactory conditions for Scientists

7.62. Paragraphs 3-5 and 8-10 of Dr. Shah's letter refer to the working conditions, particularly of the junior scientists. Some of the complaints are that the Head of Division harasses a junior scientist in several ways, *e.g.* by not admitting him to the post-graduate faculty, not giving him students for research, not giving him equipment for use and not allowing him to teach a particular subject in which he is proficient. Also, the Head of Division does not receive complaints and in case one does complain to him on a certain issue, the fear is that it may do him more harm than good. There is no freedom of expression. Academic views which are not in line with the thinking of the Head of the Division or the Director, cannot be expressed. The research work is not discussed in the Division. Thus, there is no check on the type of work published. There are too many administrative bottlenecks and the time taken for getting anything for research work is so long that it causes frustration to a scientist and curbs his spirit for work.

All these complaints have been echoed by several scientists who met the Committee. In the opinion of the Committee, these complaints have some substance. The Panel of Advisers also hold the same opinion. The Committee is of the view that most of these complaints are due to improper working conditions in the Divisions. A scientist belongs to a Division where he carries out his work. The atmosphere in the Division and the Institute should be conducive to research activity. We have referred to some of these aspects in Chapter II and made recommendations in this regard in Chapter XI to improve the working conditions of scientists.

CHAPTER VIII

STATUS AND STRUCTURE OF THE AGRICULTURAL ORGANISATION AT THE CENTRE —OUR RECOMMENDATIONS

8.1. The status of an organisation should be commensurate with its objectives and functions. With our predominantly rural economy, and with more than 80 per cent of its population living in rural areas, agriculture occupies the most important position in the economic and social life of the country. The Central Government has played a very important role in the coordination and implementation of national plans in agriculture, even though agriculture is constitutionally a state responsibility. The ICAR, which has the responsibility of coordinating the schemes for agricultural research and education, has played a pioneering role in this field. The challenge posed by the successive droughts from 1966 onwards was met by revolutionary changes in the strategy for increasing agricultural production. The adoption of high-yielding varieties, was spear-headed by the ICAR. The failure, however, of the monsoon in the year 1972 has once again exposed the weaknesses of our agricultural technology. At the beginning of the year, the country was feeling confident of having made rapid strides in the field, and there was all round feeling of confidence for getting self-sufficiency in food, and even possibilities of export. The later part of the year has, on the contrary, cast a widespread gloom due to an unprecedented drought situation and shortages in the production of foodgrains.

8.2. According to the scheme in the Constitution, Entry 14 in the State List of the VII Schedule of the Constitution relating to agriculture defines the responsibility of the State Government. The Entry reads as follows:

> "Agriculture, including agricultural education and research, protection against pests and prevention of plant diseases."

The responsibility of the Union Government in this field is covered by Entry 66 in the Union List of the VII Schedule, which reads as follows:

> "Coordination and determination of standards in institutions for higher education or research and scientific and technical institutions."

8.3. The status of the organisation dealing with agricultural research and education at the centre, should be so designed that it is able to discharge the responsibilities in this sphere which devolve on the Central Government. Coordination between different Departments of the Ministry of Food & Agriculture on the one hand and with the State Governments and Agricultural Universities on the other, should be the aim of this organisation. Our recommendations regarding the future status of the ICAR have been made keeping these factors in view.

8.4. The ICAR which has been acting as the instrument of the Central Government for the purposes of development and coordination of agricultural research and education, owed its origin to the necessity felt in the country for an organisation at the central level to deal with agricultural research just after the constitutional changes of 1919 which transferred the responsibility for development of agriculture to the Provincial Governments. The objectives of the ICAR as laid down in the original Resolution of May 23, 1929 can be usefully recalled even today. They were:

> "(*a*) The promotion, guidance and coordination of agricultural and veterinary research throughout India. The Council would not, however, maintain research institutions directly under

its control, nor would it employ its own staff of experts. It would merely determine whether a particular scheme of research was of all-India or of local importance and whether it would best be carried out at an Imperial and or Provincial research institution or individual and would then, after subjecting the scheme to examination by its expert advisers, make grants as it considered suitable.

(*b*) The training of research workers under a scheme of research scholarships or in other ways.

(*c*) The collection and dissemination of information in regard not only to research but to agricultural and veterinary matters generally.

(*d*) The publication of scientific papers, etc.".

8.5. After the major organisational changes which took place in 1966, the Council directly undertook research and administration of several Central Research Institutes. The main objectives of the Council have now been summarised as indicated below:

(*a*) to undertake, aid, promote and coordinate agricultural and animal husbandry education, research and its application in practice;

(*b*) the development and marketing by all means calculated to increase scientific knowledge of the subjects and to secure its adoption in everyday practice;

(*c*) to act as a clearing-house of information not only in regard to research but also in regard to agricultural and veterinary matters generally;

(*d*) to establish a research and reference library with reading and writing rooms and to furnish the same with books, reviews, magazines, newspapers and other publications; and

(*e*) to do all other things as the society may consider necessary incidental or conducive to the attainment of these objectives.

8.6. After the reorganised Council came into existence, the Study Team on Agricultural Administration, appointed by the Administrative Reforms Commission, examined the working organisation and the functions of the ICAR in the context of overall requirements of the country. The Study Team went into the relationship between the Union and States with regard to agricultural development and recommended that the Central Government, in the agricultural field, should be concerned mainly with the following functions:

(*a*) Formulating national plans for agricultural production;

(*b*) Helping States during emergencies;

(*c*) Developing national Land and Water utilisation pattern;

(*d*) Appointing National Commissions for important nation-wide problems in agricultural production;

(*e*) Dealing with international assistance and collaboration;

(*f*) Foreign trade;

(*g*) Watching the international trends and advising the States;

(*h*) Problem of national importance and priorities;

(*i*) Providing high level expert guidance to the States; and

(*j*) All other matters as per the provisions in the Constitution.

8.7. The Study Team made following specific recommendations with regard to research, education and training:—

"The Centre should hand over agricultural research, education training institutions to the States while retaining only the All India institutions. Similarly, the various offices and posts which have been created to supervise and bring pressure on the States for implementation of programmes should be done away with. The States' Liaison Unit in the Ministry of Food & Agriculture should be abolished. The various marketing offices and laboratories presently administered by the Central Government should be handed over to the States. In regard to agricultural research, education and extension the Central Government has responsibility to ensure maintenance of standards, To achieve these objectives, a National Accredition Commission should be set up by the Centre to ensure that the institutions of higher education maintain standards of teaching. This will provide a satisfactory basis for financial support and for ensuring supply of adequately trained man-power for public purposes. In regard to research, there must be provision for an annual report and critical assessment of research done both at the Centre and State institutions by selected, reputed scientists for each discipline.

Memorandum of agreement should be introduced between the Central and State Government agencies in respect of projects which need their mutual collaboration. This should also include the commitments in regard to supplies services. The memorandum should detail the specific responsibilities of the Centre and the State to implementing the projects. The time schedule within which the projects have to be completed should find a mention in the memorandum."

8.8. In its very nature, problems of agricultural development are not susceptible to a universally applicable research and development effort. Different soil structures in different regions, the differences in climate, the differences in our food habits and various other regional features suggest that any organisation for development of agriculture should have a strong bias in favour of combating local and regional problems. The new agricultural methodology has also thrown up a number of local problems in the field of pest control, production of quality seeds, use of fertilisers, testing of soil, etc. All these problems to be effectively met and solved, can be dealt with only by local and regional organisations. The Education Commission and the Indo-American Teams, have all laid great stress on the development of agricultural education and research efforts around well established agricultural universities in each State. Agricultural Universities have now been established in almost all the States and while in certain States they have done commendable work, in others their work has not been so fruitful. They have often got bogged down in the face of financial and administrative problems. Recently, an effort has been made to develop some of the weak universities with the help of finances from the World Bank.

8.9. In our opinion, the long-term objective of the Central Government should be to organise and develop in co-operation with State Governments, the Agricultural Universities in the States and enable them to contribute in an effective manner to agricultural research. For some time to come, however, particularly in the context of the present food situation, the Central Government would have to continue to make a substantial effort in the process. The role of the ICAR, therefore, at least for the duration of the next decade would lie in undertaking the necessary research effort required to sustain the levels of production already reached and to increase them further.

8.10. The present status of the ICAR as intimated by the Council is that it is registered under the Societies Act since its inception (1929). However, the Secretariat of the ICAR has been functioning as an attached office of the Ministry of Agriculture since 1939. The reorganisation of 1966, which brought

under the direct administrative and technical control of the ICAR a large number of research institutions of the Ministry of Agriculture, also brought in its wake a large number of problems. Along with this the requirements of funding agricultural education and ensuring its proper growth, has increased the responsibilities of ICAR.

8.11. The main problems being faced by the ICAR which have a direct bearing on the suitability of its existing status can be broadly classified as follows:—

(*i*) *Problem relating to its employees.*—A large number of Government employees who were previously working with the Central Research Institutes have been served with options to opt for the services of the ICAR Society or to opt out of the Government service in accordance with the rules. There has been considerable dis-satisfaction among these employees, who do not want to severe their connection with the Government, unless they have a reasonable assurance that their rights and privileges which they enjoy as Government servants would be protected by the Society. At the same time there has been dis-satisfaction among the employees of the Society itself (known as Research staff) who have been feeling agitated because the Secretariat has continued as an attached office of the Ministry of Agriculture, and they have not been given similar facilities in matters of seniority, promotion, medical, housing etc. In addition, there is the problem of fully integrating the staff of Central Commodity Committees which have come under the control of the ICAR.

(*ii*) It is increasingly being felt that the ICAR Society has not been able to provide effective coordination between different research institutions, for purposes of a coordinated research effort.

(*iii*) There is a feeling in the ICAR that it is finding it difficult to function in an effective manner, since as a Society it cannot directly deal with the State Governments.

(*iv*) Finally, in the field of agricultural education, it has not been possible for the ICAR in its present status as a Society, to be able to exercise sufficient pressure with the Agricultural Universities to ensure an orderly growth of agricultural education and teaching.

8.12. It may be recalled that the Royal Commission on Agriculture has recommended the creation of the ICAR under an Act of Legislature. However, the Central Government at that time considered a flexible set up of a Society more appropriate for this purpose. It is generally believed that this type of flexible set up is more suitable for research. This system is very flexible and it can adopt its own rules and procedures for recruitment, purchases, construction, etc. The constituent units of such a body can also enjoy sufficient degree of autonomy. Moreover, such a flexible set up can work better with institutions like Agricultural Universities. The working of the ICAR as a Society since its inception, however, shows that in actual practice it has more often than not sacrificed its autonomy in favour of Government rules and regulations. Till 1966 recruitment to posts under the Society was bieng made through the UPSC. The headquarters office as from 1939 functioned as an attached office of the Government. It has been headed from the very beginning by a nominee of the Government. The funds have mostly come from the Government and its source of income from the cess funds is less than 5% of its total annual budget now. It has followed the Government rules and procedure for purchase of equipment and construction of buildings. A large number of Government servants have always been in the organisation. Looking to all these facts, it would even be correct to say that calling it a Society has been a myth. As a matter of fact, this attempt to keep up the myth of ICAR being a Society, has created considerable confusion and agitation in the minds of employees and also in

the public mind. We feel that the time has now come when the Central Government should itself directly take up agricultural research as one of its responsibilities, rather than entrust it to a Society or a corporation. In order that coordination of research is done in an effective manner, the ICAR should enjoy a status which would enable it to deal with the State Government and the Universities on the same footing as other bodies under the Central Government are able to do. It would be possible to achieve this objective if the ICAR is converted into a Department of Agricultural Research and Education under the Ministry of Agriculture.

Organisation of Department of Agricultural Research and Education (DARE)

8.13. We are aware of the limitations which the Department of Agricultural Research & Education might have to face in its actual working. In order to ensure that this department in its actual working does not rigidly function like the other departments of the Government, we have considered a number of innovations which ought to be introduced to make the department more responsive to the responsibilities attached to it. We also feel that the department can discharge these responsibilities properly if our other recommendations which we have made in this Report regarding its own functioning, the functioning of the Institutes and the functioning of the Divisions in the Institutes are implemented as a composite scheme. The more important of these recommendations may be usefully reproduced here to show our anxiety that this scheme can work only as a composite scheme :

1. Maximum autonomy to the Institutes.
2. Powers should be delegated down the line to the scientists actually doing research.
3. All managerial posts upto the Head of the Division level should be held on tenure basis.
4. D. G., Directors and Heads of Divisions should exercise their powers in consultation with properly constituted committees.
5. In the field of agricultural education and research, adequate importance should be given to the Agricultural Universities.
6. The status of the employees of the Society should be suitably safeguarded.

8.14. The Department of Agricultural Research & Education (DARE) should be headed by the Minister of Agriculture and the Secretary to Government of the Department. The Secretary should be an eminent Agricultural Scientist and he should be designated as Director-General. We recommend the setting up of the following four bodies to help the Department in the discharge of its responsibilities. The Department should also set up Standing Committees and scientific panels for discussion of different scientific and technical subjects and problems. The DARE should have agricultural scientists in charge of various disciplines of the subject.

A. Advisory Council for Agricultural Research and Education.
B. Executive Committee on Agricultural Research (ECAR).
C. Executive Committee on Agricultural Education (ECAE).
D. Coordination Committee of the Ministry of Agriculture.

8.15. We also recommend that these bodies may be constituted as follows :—

A. Advisory Council for Agricultural Research & Education

1. President—Minister for Agriculture.
2. Minister of State for Agriculture.
3. Vice-President I (D.G., Agricultural Research & Secretary, DARE).

4. Vice-President II who will be a non-official (eminent scientist).
5. Ministers in charge of Agriculture in the States.
6. Ministers in charge of Animal Husbandry and Vaterinary Services in the States.
7. Minister of Agriculture or Administrator of each Union Territory.
8. Secretary, Agriculture
9. Agricultural Commissioner } to the Government of India.
10. Animal Husbandry Commissioner
11. Six officers of the DARE to be nominated by the President.
12. Six experts in agriculture, animal husbandry and veterinary sciences from outside the Government to be nominated by the President.
13. Six Vice-Chancellors of Agricultural Universities to be nominated by the President.
14. One representative of CSIR.
15. One representative of UGC.
16. Financial Adviser in Department of Agriculture.

The Advisory Council for Agricultural Research and Education should meet at least twice a year and review the progress and problems of agricultural research and education in the country. This body would provide the forum for discussion of policy matters and for issue of suitable recommendations to the Department and the Advisory Committee. Its non-official members would hold office for five years. One of the Senior Agricultural Scientists of the DARE should function as its Secretary.

8.16. B. Executive Committees on Agricultural Research
(Total—15 members)

1. Secretary, DARE/Director-General, Agricultural Research	*Chairman*
2. Chairman of ECAE	*Member*
3. Two Vice-Chancellors from Agricultural Universities	*Member*
4. Two representatives from State Govts.	*Member*
5. Four experts from outside the ICAR in different agricultural sciences	*Member*
6. Financial Adviser, Department of Agricultural Research & Education	*Member*
7. Four nominees from the Department of Agricultural Research & Education to be nominated by the Minister	*Member*
8. A Senior Agricultural Scientist of DARE	*Secretary*

8.17. The Executive Committee on Agricultural Research would advise the Department on all general matters relating to problems of research, allocation of funds, selection of research projects, determination of priorities for research etc. The advice of this body should be invariably obtained for selection of All India Coordinated Projects and their allocation to different institutions, including the Agricultural Universities. Conventions should also be developed in which the recommendations of this body regarding allocation of research funds to institutions outside the Department would be normally accepted. The Executive body should meet as frequently as possible and not less than four times a year.

8.18. C. Executive Committee on Agricultural Education
(Total—15 members)

1. Vice-President II of the Advisory Council (eminent scientist)	*Chairman*
2. Secretary, DARE (Director-General)	*Member*
3. Chairman, UGC or his nominee	*Member*

4. Five Vice-Chancellors of Agricultural Universities . . . . . *Member*
5. Directors, IARI, NDRI and IVRI . . . . . *Member*
6. Two representatives of State Governments. . . . . *Member*
7. Financial Adviser, Department of Agricultural Research & Education . . . *Member*
8. Representative of Deptt. of Agriculture . . . . . *Member*
9. A Senior Agricultural Scientist of ECAE . . . . . *Secretary*

8.19. The allocation of funds to the Agricultural Universities would be decided by the Executive Committee on Agricultural Education. They would follow such procedures as they might determine for the purpose but preferably methods being followed by the UGC. Necessary secretariat assistance would be provided by the Department of Agricultural Research and Education. The Vice-President of the Central Council, who would be the Chairman of this body may not be a full-time officer of the Government. The secretariat wing to be created within the Department should be manned by competent personnel to provide all assistance to the committee. Details regarding these have been mentioned elsewhere in the Report (Chapter IX).

8.20. D. COORDINATION COMMITTEE OF MINISTER OF AGRICULTURE
(Total—6 members)

The Committee feels that agricultural research being a means to an end, the activities of the Department of Agricultural Research & Education should be fully coordinated with the other Departments under the Ministry. We suggest the constitutions of a high-powered Coordination Committee under the Minister of Agriculture. The Secretaries of the Department of Agriculture, Department of Agricultural Research & Education, Department of Community Development, Department of Food and Chairman of the Executive Committee on Agricultural Education, should be its members. This Committee should meet as frequently as possible and take stock of the problems facing the Ministry.

8.21. The Committee considered the problems likely to be faced by the existing employees of the Society as a result of conversion of the ICAR into a full Department of the Government. In the note on the setting up of the Agricultural Research Commission, the DG, ICAR had stated that the integration of these employees into the Department would be done in consultation with the concerned Departments of the Government. We find that already there is considerable apprehension in the minds of the employees of the ICAR about the likely results of this step. The ICAR Employees Welfare Association which represents the ministerial staff of the research side in the Council, has presented a detailed memorandum covering different issues before the Committee. Our comments on this memorandum appear in Chapter XI of our Report.

We would like to emphasise that the Government should carefully consider the implications of this change in the status of the existing employees of the ICAR and take adequate measure to protect their legitimate rights of seniority and other benefits. In Chapter XI, while dealing with the memorandum of the ICAR Employees' Welfare Association we have recommended that before the integration of these employees, their peculiar problems relating to confirmation and seniority should be decided before-hand. The Government may also consider their demand that in case of their merger with the Central Secretariat Services, the secretariat of the DARE may be treated as an excluded office. We would like to emphasise the importance of careful consideration of the likely effects on their rights and privileges to ensure that the new set-up is not burdened by any dis-satisfied section in its staff.

8.22. The Committee considered the proposal regarding the constitution of Agricultural Research & Education Commission as mentioned in the note sent by the DG, ICAR for the information of the Committee. The Committee feels that Agriculture cannot be compared with subjects like Atomic Energy, Space and Electronics which are purely Central subjects. In their set up at the Centre in the field of Agriculture, the Central Government would have to operate within the framework of the constitutional provisions with due regard to the autonomy of the State Governments. The advantages of the three Commissions, which have so far been set up by the Government of India, were that the Commissions had within their framework the entire gamut of functions relating to their particular subjects. In the field of Agriculture, on the other hand, apart from the State Governments and Agricultural Universities, at the Centre also the activities would be divided into four organisations *i.e.* Department of Agriculture, Department of C.D. & Co-operation, Department of Food and DARE. The proposed Agricultural Research Commission would be dealing with only one part of the activity and would not be able to contribute effectively towards the goal of increased production. Finally, by its very nature, the setting up of a Commission would imply centralisation of functions in a sensitive field where regional and local problems demand more and more decentralisation. Therefore, the Committee does not approve of the idea of setting up of a Agricultural Research Commission which is the current thinking of the ICAR and the Ministry of Agriculture.

Status of Institutes under the ICAR

8.23. The Report of the Agricultural Research Review Team, which formed the basis of the reorganisation of the ICAR in 1966, also went into the question of the organisation of the various Central Government Institutes which were now to be controlled by the ICAR. They had recommended that the ICAR should assume full technical and administrative control of all existing commodity committees and other research organisations in the fields of Botany and Zoology, Fisheries, Forestry and Food Processing which were being financed by the Government of India through various channels. The Team, however, took pains to emphasise the need for fullest possible operational autonomy to these Institutes in its Report. It would be worthwhile to reproduce their recommendations in this regard in toto :

> "It must be emphasised that technical and administrative control of Institutes is not intended to amount to the direction of research in detail. Directors of Research Institutes must be carefully chosen as the best scientist-administrators available, and given the greatest possible degree of autonomy and scope for initiative in the framing and implementation of suitable programmes. The Coordinating body must guide, rather than direct, the Institutes under its control. All the authority possible should therefore be delegated by the Council to the Directors".

8.24. They recommended that the IARI, IVRI, NDRI should be declared Institutes of national importance and should report directly to the Director-General of the ICAR. While discussing the role of headquarters staff in relation to these Institutes, the Team remarked "The headquarters staff is to be the Director-General's staff, and not a layer in an administrative hierarchy, superior to the Directors and Heads of Divisions in Institutes."

8.25. The circumstances have not changed considerably since the Report was submitted to the Government, and the developments since then have further emphasised the necessity of further decentralisation of powers and greater autonomy to these Institutes. We notice that the reorganised ICAR did not make sufficient headway with regard to the implementation of these very important recommendations. The Committee has been informed that sometimes, even for routine matters, the Institutes had to look up to the ICAR headquarters. The spirit of a hierarchial set up which the Team had tried to discourage, has permeated in almost every sphere of the working of the organisation, so much so that it has percolated down to the lowest level of Heads of Divisions. The Committee was repeatedly told that the

bureaucratic attitude of various functionaries holding managerial posts in the organisation has more often than not, acted as a stumbling block in the creation of proper scientific atmosphere in which alone, purposeful research could thrive. The present set up in the ICAR at each managerial level is characterised by an effective centralisation of almost all the important functions such as coordination of research, undertaking of research, administration of research programmes and staff and financial matters. This centralisation of functions starting from the top and going down to the level of Directors and Heads of Divisions, in our view, has led to considerable dis-satisfaction in the minds of scientists.

8.26. Under the new set up in the ICAR we would suggest maximum autonomy for its Institutes. The spirit which should govern the relationship should be that the Institutes are ragarded as Institutes in the DARE and not under the DARE. The IARI occupies a distinct place as compared to other Institutes since it enjoys the status of a Deemed University under the UGC Act. In the ordinary course, the IARI should have complete autonomy in administrative, financial and academic matters. We find, however, that it is only in the academic field that complete autonomy has been given. In other respects, though the Director, IARI, does enjoy more powers, as compared to other Directors, and recently he has been given a higher salary, yet in practice this limited autonomy has not made much difference between the working of the IARI and other Institutes.

8.27. One of the view-points put forth before us is that, to give a completely different status to the IARI as compared to the other Institutes would not be proper. As a matter of fact, the policy of making three Institutes as National Institutes and keeping others in a different position, has also been criticised. We find that the IARI, NDRI and IVRI owe their present eminent position, partly due to historical reasons and partly because of the availability of post-graduate and Ph.D. teaching facilities in them. However, it is very likely that in future the other Institutes also which are doing important work, such as jute, cotton, rice and fishery institutes, may develop considerably and acquire prominance. In our view, therefore, while deciding the measure of autonomy to be given to all the Institutes, they should be treated alike as far as academic, financial and administrative matters are concerned.

8.28. We recommend that each Institute should have a small and compact representative executive body of senior members of staff to advise the Director in exercise of his powers and responsibilities. Conventions should be developed in which the advice of this executive body would be respected by the Director. The members of the executive body would also hold office by rotation and their tenure should be for a period of two years. The idea of recommending the tenure of two years is to enable a larger number of scientists to join the Committee, though we are recommending a tenure of three years for Heads of Divisions, five years for Directors and other scientific officials in the DARE. In addition, each Institute should set up Standing Committees and Scientific Panels to deal with specific problems. In these Standing Committees and Scientific Panels, attempt should be made to give representation to other sister organisations engaged in similar activities. In the financial sphere, the annual budget of the Institute would be approved as is being done today by the appropriate bodies in the Department and after that it would be left completely to the executive body to authorise expenditure within the annual ceiling in the budget. In case any amount, over and above the annual ceiling is required, separate requests should be made to the Government. In the administrative field, the Institutes should continue to make all appointments upto such posts, subject to the recommendations which we have made in the appropriate Chapter X relating to methods of recruitment. We have in the Report separately made recommendations regarding the working of the Divisions of the Institutes. We feel that if there is delegation of powers all along the line, sharing of responsibility by all and authority is exercised in consultation with respective Committees which we have recommended, it would help in revitalising the whole structure. This would give a sense of participation to all the scientists in each Institute and ensure the requisite atmosphere in which purposeful research would be possible.

Consideration of general and individual problems of the employees :

8.29. It is a recognised fact that each organisation should have well-defined channels through which the employees of the organisation could represent their legitimate general and individual grievances. In the Departments of the Central Government, the Joint Consultative Machinery is functioning at various levels and it has provided a useful forum for discussion of the problems between the employees and their officers. We have found that in the ICAR no such effective forum was available for useful exchange of views. We feel that if such a forum had been available, the employees would have felt more assured and satisfied and at least some of the large amount of dis-satisfaction prevailing in the campuses of the Institutes could have been avoided. The schemes of Staff Councils we found did not work properly.

In order to fill up this gap, we recommend the setting up of a two-tier structure. For discussions of general problems of the employees the system of Joint Consultative Machinery should also be implemented in the Department of Agricultural Research and Education. This would enable the discussion of the general problems at the Central level of the Institutes.

For the discussion of legitimate individual grievances of the employees, we suggest the constitution of Grievance Cells in each Institute. The Grievance Cell should have three to five members nominated by the Executive Council of the Institute and would select its own chairman. The Cell would devise its own procedure for dealing with grievances presented before it in accordance with the principles of natural justice. The tenure of the members should be two years. In regard to the three large Institutes—IARI, IVRI and NDRI—similar Cells may be set up in each Division.

All India Coordinated Projects

8.30. There are about 70 All-India Coordinated Projects (AICP) under the ICAR distributed all over India. There is a Project Coordinator for each project belongs to the ICAR and is located in one of the Institutes of the ICAR. There are several Coordinators in each AICP who belong to the Institutes of the ICAR, Agricultural Universities or other Universities. AICP came into being in 1962. There work is of an applied nature and is carried out in the field. They develop methods by which output of different crops can be increased. This work is of great importance for the country.

8.31. The Project Coordinator and his subordinates are appointed by the ICAR and are located in one of the ICAR Institutes. Each Project Coordinator has a small staff and they are generally attached to one of the Divisions of an ICAR Institute. In IARI in particular, there are 16 Project Coordinators. Though such a concentration of Project Coordinators in one Institute is not desirable, we realise that this could not have been avoided due to the presence of scientists of high calibre in this Institute.

8.32. The location of the staff of AICP within a Division of an Institute has advantages as well as disadvantages. The Project Coordinator has an independent grant which he operates. Administratively, however, he is under the Director of the Institute. He is in the same scale of pay as the Head of the Division. In most cases, both the staff of the Division and the staff of the Project Coordinator have worked together well. However, in the case of Agronomy Division, problems have arisen after the death of Dr. Bains who was Head of the Division. The Head of the Division of Agronomy does not consider the staff of AICP as belonging to the Division, whereas in other Divisions of IARI this distinction is not made. Several reports have come to us indicating differences between the Project Coordinator and the Head of the Division of Agronomy on small matters which is not a healthy sign for good administration.

8.33. Institutes like IARI, NDRI and IVRI are engaged both in teaching and research. Recently, the Achievement Audit Committee of IARI mentioned that IARI being a premier institution, it

should engage itself more in fundamental research in agriculture, and the applied agricultural research should be left to other Institutes which are engaged only in research. Fundamental research is a pre-requisite for applied research. Unless basic findings are made in specific aspects of agriculture, for example, production of a new variety of seeds, no progress can be made in applied research. The staff of the Divisions of the IARI should, therefore, engage mostly in fundamental research. The staff of the Coordinated Projects, on the other hand, are mainly for applied research and they have to visit various parts of the country to study the different aspects of crops like their susceptibility to pest, fertiliser requirement, yield etc.

8.34. We realise that it is essential for the staff of AICP to keep in touch with the recent research so that they may remain upto date with the recent findings in agriculture, and would be able to extend it to the fields. Therefore, we recommend that in academic matters, the staff of the Division and the staff of the AICP should work together. The knowledge of the research workers of the Division would be of benefit to the workers of AICP and the applied knowledge of the AICP workers would also be of benefit to the researchers of the Divisions, because after all, all findings on basic aspects of agriculture should find application in the field. In our view, this can best be achieved if the staff of the AICP is merged with that of the Division and enjoy the same privilages and facilities accorded to the staff of the Division. We recommend that, as far as possible, new AICP should be assigned to competent senior scientists of the existing staff of Institutes of ICAR. Otherwise the question of absorbing outside scientists assigned particular coordinated projects may sometime present difficulties. Also, AICP should be assigned to competent scientists in Agricultural Universities and Institutes not under the ICAR.

8.35. The privilages and facilities of the staff of the AICP should be the same as those of the staff of the Division in equivalent grades both in academic and other matters. The staff of the Division should be eligible for appointment in an AICP and *vice versa*. There should be no distinction between them in teaching and research functions. The staff of the AICP who are eligible for guiding Ph.D. and M.Sc. students, should be allowed to do so. The Project Coordinator should be in the grade of Principal Scientist, and should be a member of the Divisional Committee. He should also take up Headship of the Division when his turn comes by rotation as proposed in Chapter XI. In view of the fact that there would be a Divisional Committee to look into most of the administrative matters, it is likely that the Project Coordinator may not be burdened too much and may find time to look after his project. Even so, the work of the Project Coordinator being in the nature of full-time work, if a Project Coordinator becomes the Head of the Division, a suitable interim arrangement should be made to look after his work during his tanure as Head of the Division. This interim arrangement may function under the general supervision of the Project Coordinator who has become the Head subject to such other administration as might be considered desirable or necessary.

8.36. We recommend that the administration of AICP should be similar to that of a Division. The Project Coordinator should have a committee which should consist of all Research Officers who should meet at least once a month and look into the problems of the Project. The ICAR should make consolidated grants for each AICP which should operate through the Director. Effort should be made not to have too many AICP at any particular Institute. Professors of Agricultural and other Universities should be appointed as Project Coordinators in order to make this programme more broad based and to make its impact felt on a larger section of people.

CHAPTER IX

AGRICULTURAL EDUCATION

9.1. Proper education is the very basis of progress. Since the objective of the country is to be self-sufficient in food and proper agricultural education is essential to attain this objective, the Committee has given serious consideration to this aspect. The Education Commission in its report (1966) had also emphasised the need for improving agricultural education in the country (p. 348). We propose to express in this Chapter our thinking in regard to the character, importance and significance of agricultural education in our country in the present context.

9.2. Agricultural education should be modern, broad-based, relevant and intensive. Only then agricultural scientists can contribute meaningfully and substantially to agricultural research. The research would in that event be relevant, and thus help in the development of the country's economy. Agricultural education, like any other education, should be free of political pressures to that the teachers have the freedom to teach and the students have the freedom to learn. It is needless to say that a scientist with better background would be more eminently fit to do research than a scientist who is not well trained.

9.3. For increasing the production of food and for maintaining an adequate rate of growth, the Education Commission says on p. 348 of the Report:—

> "These goals can only be achieved through the application of science and technology to the problems of agricultural production and rural betterment. This involves large-scale capital investment for the provision of irrigation, fertilizers, pesticides, improved seeds, credit facilities for farmers, satisfactory arrangements for storage and distribution of farm products, improved communications and transport, electrification, etc. But this is not enough. We must in addition provide for high quality education and research for agriculture. Without them, the necessary rapid increase in agricultural production will not be possible and there may even be a danger of the capital inputs being wasted. An instance is the present wasteful use of irrigation waters which, applied more intensively to the smaller areas and with greater attention to drainage, could significantly increase agricultural production. Indeed in some areas, knowledge can be partially substituted for capital investment."

> "This programme of education for agriculture will be based on three main elements—research or the development of the appropriate technology, extension or the communication of the technology to practising farmers, and training of the needed personnel."

9.4. The extent to which the Education Commission has stressed the importance of agricultural education for the nation can be seen on p. 349 of the Report :—

> "But if agricultural development is to receive the impetus it needs, education for agriculture must become a major concern of the entire national system of education whose responsibilities go beyond the training of specialised personnel. An orientation towards agriculture must be given in all educational institutions. Furthermore, the education system must give the training needed to those who will man the supporting services required for agricultural development. It must also develop an understanding of agricultural problems and rural life among the large group who deal indirectly with these, such as planners, administrators, lawyers, bankers, community

leaders and entrepreneurs. It is on these groups that the better development of essential supporting services such as credit, crop insurance, marketing, pricing, distribution and the provision of better conditions and incentives for farmers will depend."

9.5. Agricultural education is not laboratory based as we have already mentioned in Chapter II. It is predominantly applied. Agricultural scientists should know how to apply their training in the field. In order that they make effective use of their knowledge, it is essential that there should be good liaison between the agricultural university and the Department of Agriculture of each State. The Education Commission on p. 350 has observed that there is little liaison between these two organisations. Furthermore, most of the States have one or more Institutes of the ICAR and at least one Agricultural University. There appears to be little liaison between these institutions also. The Agricultural University feeds agricultural scientists to the Institutes of the ICAR. If the standard and training in these Universities is improved, the standard of research in the ICAR Institutes would automatically be enhanced. So the ICAR for its own progress and benefit should contribute more effectively towards agricultural education in the country.

9.6. During the Fourth Plan period, only Rs. 28 crores were allocated by the Planning Commission for agricultural education out of a total of Rs. 85 crores. In a circular issued by the ICAR it is stated that not more than Rs. 2 crores would be given to a State for financing agricultural universities. A statement received from the ICAR shows that the amount allocated for *ad hoc* research schemes sanctioned to agricultural universities is gradually decreasing since 1966. Yet another decision of the ICAR is that no post-graduate training programme in any field should be opened in an Agricultural University if it is already available in one of the three teaching Institutes of ICAR. The Director-General of ICAR in his statement before the Committee mentioned that the ICAR has not been very effective in improving education in Agricultural Universities. These matters, in our opinion, are detrimental to the proper development of Agricultural Universities and agricultural education generally.

9.7. In our view, agricultural education has not been given its due importance. In spite of the fact that agricultural output had increased considerably since 1965 due to the introduction of high-yielding varieties of seeds, the recent failure in the production due to drought conditions has shown that we have still to go a long way to place our agriculture on a sound base. We believe that if a well-trained cadre of agricultural scientists is prepared, agricultural production would tremendously increase. Larger the input of agricultural education, greater would be the output of agricultural research and that naturally would help larger production. We, therefore, recommend that allocation of funds for agricultural education should be increased.

9.8. It is common knowledge that Agricultural Universities which have proper facilities have also contributed towards agricultural research. This is because the Universities have specialists who can effectively contribute to education as well as research. The feasibility of carrying out an integrated programme of research is greater in a University than in an Institute which generally specialises in one discipline. A research worker often has to consult or take the help of specialists in allied fields for his research. This is supported by the fact that the contributions of the three Institutes of ICAR—IARI, IVRI and NDRI where both teaching and research are carried out, and of the two Agricultural Universities at Pantnagar and Ludhiana have been immense.

9.9. With the above background, we recommend the following for improving and strengthening agricultural education in the country.

9.10. As proposed in Chapter VIII, the DARE should have an Executive Council for Agricultural Education (ECAE) with an eminent scientist as its Chairman. He would be directly responsible to the

Minister. Its Secretary would be an agricultural scientist who would also be the head of the secretariat of ECAE to be located in DARE. The secretariat should have specialists for various aspects of agricultural science.

9.11. The functions of ECAE would include the following :—

(*i*) Allocation of funds to Agricultural Universities on the basis of the assessment of their needs, potential and capability to improve Under-graduate and Post-graduate teaching research and extension.

(*ii*) Allocation of funds for teaching and associated research to teaching Institutes of DARE including maintenance grants on existing basis.

(*iii*) Opening of post-graduate and under-graduate courses in agricultural universities and teaching in the Institutes of DARE.

(*iv*) Allocation of funds for fundamental and applied research to scientists in Universities other than Agricultural Universities who may submit research proposals to this body.

(*v*) Selection of candidates for scholarships and fellowships for under-graduate and post-graduate research to be carried out in the Universities and Institutes. These should be awarded not only to agricultural graduate but also to other science graduates. This may be done by inviting applications from all over the country. The selected candidates may do research not only in agricultural institutions but also in other universities.

(*vii*) Maintenance of standard of agricultural education by periodic review of curricula, organising workshops, summer schools and seminars for updating agricultural knowledge of teachers, etc. What is needed now is better quality of agricultural scientists and not a larger number of them. There are already 19 Agricultural Universities in the country. It would be more profitable to improve the teaching and research programme in the existing Agricultural Universities rather than open new Agricultural Universities. Any proposal for opening of a new Agricultural University should be properly scrutinised by this Executive Committee before according approval.

9.12. It is our considered opinion that liaison between the scientists of Agricultural Universities and those of Research Institutes should not only be established but strengthened. Scientists of Institutes should be allowed and indeed encouraged to take up teaching assignments in Agricultural Universities. Likewise the scientists of Agricultural Universities should be allowed and encouraged to use the facilities available in Institutes. Common seminars may be held by both groups of scientists. Thus, there should be free flow of ideas between the two groups, all aimed at the progress of agricultural education and research of the country and self-sufficiency in food.

CHAPTER X

PERSONNEL POLICIES FOR THE DEPARTMENT OF AGRICULTURAL RESEARCH AND EDUCATION

10.1. An agricultural research organisation like any other research organisation should have a tradition, a culture, which should be institutional rather than personnal. The research workers form the core of the organisation and on them depends the progress of agricultural research and self-sufficiency in food. Their dedication and devotion to duty are important for planning and progress. Therefore, it is of utmost importance that recruitment of agricultural scientists of high calibre is made to this field judiciously and impartially. In our country various methods of recruitment of scientific personnel are followed by different organisations. For example, the recruitment of scientists under the Atomic Energy Commission, Defence Science, CSIR, ICMR and ICAR are different from one another. The universities follow another method of recruitment, whereas some of the top private organisations have yet another procedure. Whatever may be the method of recruitment, it is of utmost importance that the best talents are recruited in a fair and objective manner.

10.2. In this context, it is relevant to mention that the Government of India appointed a Committee in 1968 under the chairmanship of a retired Chief Justice of the Supreme Court of India, Mr. A.K. Sarkar, to look into the allegations in regard to irregularities in appointments in the CSIR. The Committee found that there were indeed several irregularities. This may be due to the subjective element involved in selections and the structure of the organisation itself. This problem exists not only in India but also in foreign countries. In several advanced countries the recruitment policy is reviewed periodically to make it more objective.

10.3. It may be recalled that before 1966, the recruitment of staff of the Institutes was done by the UPSC as the Institutes were under the Government. Also, the recruitment of the staff at ICAR headquarters was done by the UPSC. After the reorganisation of the ICAR in 1966 and the merger of the Institutes with the ICAR, all recruitments were made by the ICAR itself. The reasons given for taking recruitment out of the purview of the UPSC were that :—

(*a*) the time taken by the UPSC for selection was too long;

(*b*) the selection boards of UPSC did not have sufficient number of specialists to select scientists of any discipline; in UPSC only one expert was present who served as an adviser;

(*c*) the system of recruitment under the UPSC was such that a scientist of lower cadre could not be promoted to a higher post even if there was a vacancy; such promotions needed the usual procedure of advertisement, interview, etc. which involved inordinate delays;

(*d*) there was no scope for weeding out incompetent scientists or retiring them early; and

(*e*) the recruitment procedure and the structure was such that it encouraged a scientist of one commodity or discipline to move into another commodity or discipline which meant loss of experienced scientists.

10.4. We give below our analysis of the present position of recruitment, particularly in regard to the four points mentioned above. :

(*a*) In order to get an idea about the time spent by the ICAR in making recruitment to scientific and technical posts, the ICAR was requested to supply data on a sample basis for 100 to 200 posts. The ICAR supplied data on 138 posts, recruitment for which was done during 1970 to 1972. Similar information was obtained from the UPSC. The analysis shows that whereas the ICAR had taken on an average 9 months and 4 days for making recruitment, the time taken by the UPSC was 7 months and one day for 1970 and 8 months and 18 days for 1971. The ICAR was informed of this analysis and was requested to comment on the same. The comment was that a period of 24 days should be reduced from the average time taken by the ICAR which represents the time-lag between the date of issue of appointment offer and date of filling up of the post. Corresponding figures for this for UPSC were not available. An interesting feature of our analysis is that in addition to the time taken in making recruitment to the ICAR, the Institutes took on an average 8 months and 11 days to intimate the ICAR regarding the existing of a vacancy. There are about 15 cases in which the Institutes have taken more than one year to intimate the ICAR of the vacancy.

(*b*) Our analysis of the constitution of several selection committees shows that only one expert was present. In many cases, for example, in a discipline with several sub-disciplines, only generalists were present as experts and not specialists. There has been no improvement in the system of recruitment under the ICAR.

(*c*) The criticism against the system of recruitment under the UPSC was that competent scientists could not be promoted without going through the regular procedures of recruitment involving fresh interview, etc. We find that the system of recruitment under the ICAR similarly required the scientists to appear before the selection committees frequently. Also posts were to be filled by direct and open recruitment and even the limited reservation for departmental quotas available under the earlier system were done away with.

(*d*) There is no record to show that the ICAR has framed any rules to weed out or retire incompetent scientists.

(*e*) Since all selections were open and there were large number of grades, there were innumerable instances of scientists moving from one discipline to the other even for small financial gains, thus resulting in loss of experienced scientists. Several scientists of ICAR who gave answers to the Questionnaire have mentioned of cases where scientists have moved from one discipline to another.

Thus, we are constrained to say that the objectives for which ICAR took recruitment out of the purview of the UPSC have not been achieved during the last six years. The new system also created considerable dissatisfaction among the scientists.

10.5. The majority of ICAR scientists who gave evidence before the Committee and those who answered the Questionnaire mentioned that the present recruitment policy was not satisfactory. The Director-General, Dr. Swaminathan, in his statement before the Committee mentioned that he would like the scientists of the ICAR to be recruited by a separate body. Shri T.P. Singh, ex-Secretary of Agriculture, also had the same view. It is of significance at this point to mention that the Administrative Reforms Commission in their report on scientific departments (page 12) have recommended that the

UPSC should have a scientific wing which should recruit scientists for various organisations. This wing should be headed by a scientist who should be the Vice-Chairman of the UPSC.

10.6. The objective of any organisation should be to select the best person for a particular job. This can be achieved only if the selection committee is competent, fair and objective. Also the persons responsible for advertising the post, screening the candidates to be interviewed and selecting the experts for the selection committee, should be fair and honest.

10.7. The Committee considered the desirability of having an independent scientific body to make recruitments, but have come to the conclusion that such a body may not have enough work to do throughout the year and appointment of a full time Chairman and Secretary, and part-time members may create several problems and may ultimately concentrate power in the hands of the full-time Chairman and the Secretary. Hence, we do not recommend the formation of a separate scientific body for recruitment of agricultural scientists.

10.8. In the light of the background and objective stated above, and taking into consideration the various pitfalls in different systems of recruitment and bearing in mind particularly the present dissatisfaction in the Institutes to which we have referred to in Chapter II, we recommend that the recruitment of scientists of the Department of Agricultural Research and Education should be made by the UPSC for five years, at the end of which the position may be re-examined. The constitution of the UPSC should be changed to provide for these recruitments, The UPSC should have a science Wing which should have three eminent scientists from the disciplines of Agriculture and Biology. One of them should be the Vice-Chairman of the UPSC. The appointment of Members of the Science Wing should be in conformity with that of other members of the UPSC. Technical staff should be appointed for the Science Wing.

Recruitment by UPSC

The UPSC will have to make recruitment to the following four broad categories :

(*a*) direct selection of junior scientists by competitive examination and interview;

(*b*) selection of scientists of higher cadres by open advertisement and interview;

(*c*) recruitment of Scientist Administrators by open advertisement and interview;

(*d*) recruitment for other posts.

(*a*) *Recruitment of Junior Scientists* (*Rs.* 400—950)

10.9. 25% of the vacancies in this cadre should be reserved for Research Assistants already working in the Institute. These Research Assistants will appear at the general competitive examination held for selecting Junior Scientists; 25% of the posts reserved for them will be filled up as a result of the Merit List of the departmental candidates consequent upon the examination. The remaining posts should be filled by the UPSC after conducting a competitive examination followed by interview as is the practice for Administrative and Engineering Services. The examination should be held once a year. M.Sc and M.Sc. (Agri.) candidates should be eligible for this test. The written papers should include the field of specialisation and the general aspects of agriculture. Candidates securing 50 per cent or more of the total marks in the written test may be interviewed for each specialisation by a Committee consisting of a Member of UPSC and two eminent agricultural scientists as experts.

The experts for each discipline should be chosen from a panel which should be prepared after receiving suggestions from the respective Heads of Divisions, Directors, Secretary, Department of Agricultural Research and Education as well as Agricultural Universities and other scientific bodies.

The selected candidate should be appointed on probation for a period of two years. During this period he should be given on-the-job training to make him proficient in discharging the duties of the post. The performance of the candidates should be evaluated by his immediate supervisor who would forward it to the Head of the Division, who, in turn, should send it to the Director with his comments. At the end of the probationary period the Director would decide if the scientist would be confirmed, his probation period extended or his services terminated. The Director should communicate his recommendation to the UPSC for necessary action.

(b) Recruitment of Scientists of Higher Grades

10.10. Recruitment of Senior and principal Scientists should be made by the UPSC. Each post should be earmarked for a specific field of the discipline when the original plan is made. When the post is to be filled, the Divisional Committee should indicate the qualifications needed for it, and forward it to the Director of the Institute who should then send it to the UPSC. The Science Wing should scrutinise this draft to find out if it is made on a broad basis and whether it provides a chance for outside candidates to apply, before sending it to the press.

10.11. The UPSC should have two experts for each selection committee who should be selected from the panel prepared on the lines mentioned above. The bio-data of the candidates should be sent to the experts so as to reach them at least seven days before the selection committee meets.

10.12. The selection committee should consist of one Member of the Science Wing of the UPSC, two experts and the Director of the Institute or his nominee who should be the Head of the Division concerned. The Member of the Science Wing should act as the Chairman. The experts should be members of the selection committee and not mere advisers as is the practice at present in the UPSC. It is our opinion that since a scientist belongs to a specialised field, it is only the experts in that field and not a generalist who can objectively assess the merits and demerits of the scientist. The annual assessment report of internal candidates should be placed before the selection committee. For external candidates, the comments of his employer and of one referee should be placed before the committee.

10.13. While assessing the merits of the candidate, the experts should take into account the particular sub-discipline in which the scientist is working. This is of importance, particularly in regard to publication of papers. In a certain post or a discipline, it may not be possible to publish as many papers as in certain other disciplines. Therefore, the general competence and aptitude of the candidate should be taken into consideration. Counting merely the number of research papers is not a proper assessment of the candidate's merits. Also, academic record, past work and performance of the candidate at the interview should be considered for selection of candidates.

(c) Recruitment of Scientist-Administrators and their tenure

10.14. The following posts come under this category

1. Heads of Divisions of Institutes
2. Joint Director/Dean/Deputy Director in Institutes
3. Directors of Institutes
4. A.D.G./D.D.G./D.G.

10.15. The post of Head of Division should be held by Principal Scientist of the Division as outlined in Chapter XI. No separate selection is necessary for this post.

10.16. Both internal and external candidates should be eligible for the other posts given in the list above. No quota from these posts should be reserved for scientists of lower grades. All these posts should be of a tenure nature and should be for a period of five years. A person holding any of the posts may be given another term of three years provided the UPSC selects him again. The salary of Directors, Joint Directors, Deans, A.D.Gs. and D.D.Gs. should be in the same scale as that of Principal Scientists, that is, Rs. 1100-2000.

The selection for these posts should be made by the UPSC after interview according to the procedure recommended for the scientists. The selection committee should consist of one Member of the Science Wing of the UPSC who should be the Chairman of the selection committee, and two eminent agricultural scientists. The experts should particularly look into the administrative ability of the candidates and his ability to carry the people of the organisation with him, his initiative, besides his research qualifications. A scientist who may be very good in research may be a poor administrator. So such a scientist should not be given this post. After his term is complete, the scientist should go back to his earlier post. The existing permanent incumbents of these posts should be given the option of returning to their original positions in the Institutes and their salary should be protected. If an external scientist is appointed in any of these posts, he should join this post with a lien from his original post. After the tenure is complete, he should go back to his parent organisation. He may, however, be allowed, to join any other post in DARE, if selected by the UPSC.

(d) Recruitment for other posts

10.17. There are several other posts within the Department, recruitment to which would have to be done by the UPSC. These posts include administrative, accounts and similar staff. We recommend that in making recruitment to these posts, the UPSC should follow the procedures that are followed for similar posts in other Departments of the Government.

Recruitment by Institutes

10.18. We recommend that recruitment to the following categories of posts should be made by the Institutes themselves :

(*i*) Technical staff

(*ii*) Supporting staff

(*iii*) Administrative staff except those that would be recruited by the U.P.S.C.

Technical Staff (Research Assistance)

10.19. These posts should be filled by the Institutes themselves by interview. The selection committees for these posts in the Institutes should be constituted as follows :—

(*a*) Each Institute should have a panel of experts for each discipline. The names of experts of this panel should be prepared by the Director on the advice of respective Divisional Committees. Each panel should have at least 10 names.

(*b*) The draft advertisement for a particular post should be prepared by the Head of the Division in consultation with the Divisional Committee. It should then be sent to the Director who should release it to the press. Applications should be received from both internal and external candidates.

(*c*) The Executive Council of the Institute should choose two experts out of the panel of experts. The selection committee should consist of the Director or the Head of the Division, one Principal Scientist of the Division to be nominated by the Divisional Committee, one Head of the Division from an allied discipline and two external experts in the field. One of the external experts should be the chairman of the committee. The proceedings of the selection committee should be recorded and justification for promoting a junior scientist over his senior, if made, should be given. These recommendations follow broadly the pattern adopted in universities.

Supporting and Administrative staff

10.20. The present system of recruitment to these posts is through the Employment Exchange. *Ad hoc* internal selection committees are appointed for these selections. We recommend that this procedure may be continued. For screening the candidates for interview and for the selection itself, the Divisional Committee/Executive Council should be associated.

SALARY STRUCTURE

10.21. The salary of scientific and technical staff of the ICAR should be such that talented workers are not tempted to leave the organisation for better emoluments in other organisations. It should be uniformly and reasonably satisfactory so that talented workers in one discipline or commodity do not feel tempted to move to another discipline or commodity in the same organisation for better emoluments. If the worker is good in a discipline, he should be retained in the same discipline and if necessary, be promoted to a higher post. We have come across several cases of migration of scientists from one discipline to another in the ICAR Institutes merely for financial reasons and this has resulted in the loss of experienced hands.

10.22. In the existing salary scales of ICAR, one notices eight scales of pay for scientists starting from an initial salary of Rs. 400 up to a maximum of Rs. 2000. Besides this, there are 4 scales for Directors, 2 for Class II Gazetted scientific staff, one for Class II non-Gazetted scientific staff, 15 for technical and para-scientific staff, and 4 for class IV staff. The salary structure is too complex, undesirable and should be rationalised as follows.

10.23. The staff of DARE should be classified into the following categories :

1. Scientific staff
2. Technical staff
3. Supporting staff
4. Administrative staff.

Salary of Scientists

10.24. The scientific staff working in a Division should be of three categories only and there should be three corresponding scales of pay. We recommend a reduction in the number of grades, but in prescribing the salaries for these grades, we have taken the precaution of not exceeding the maximum of existing grades whose merger we are recommending. It may be mentioned here that sometime back the ICAR had stopped creating new posts in Class II grade of Rs. 350-900 and all new posts were being created in Class I grade of Rs. 400-950. This has created several anomalies in Institutes where senior scientists have entered in the old Class II grade and all fresh appointments have been made in the new grade.

10.25. The following scales of pay are recommended for the scientists :

Category	*Scale of Pay*
(*i*) Junior Scientist	Rs. 400-40-600-EB-50-950
(*ii*) Senior Scientist	Rs. 700-50-950-EB-75-1400
(*iii*) Principal Scientist including Scientist Administrator	Rs. 1100-60-1400-EB-100-2000
(*iv*) Higher pay for eminent scientists.	

10.26. The proposed scale for Junior Scientist covers the following existing scales : Rs. 350-800, Rs. 350-900 and Rs. 400-950. The scale for Senior Scientists covers the following existing scales : Rs. 700-1250 and Rs. 1100-1400. The scale of Principal Scientists covers the following scales : Rs. 1100-1600, Rs. 1300-1600, Rs. 1600-1800 and Rs. 1800-2000.

10.27. As mentioned in Chapter XI, the Principal Scientists of a Division should serve as Head of Division by rotation. They should not get any extra salary like teaching allowance or administrative allowance. The practice of giving Rs. 150 as teaching allowance to Heads of Divisions in IARI should be immediately stopped. A Principal Scientist should take up this administrative work in a spirit of service to the fellow scientists in the Division. Since he would be helped by a Divisional Committee which would share most of the administrative responsibilities of the Division, he would have ample time to continue with his research. His aim should be to remain as a scientist and not become an administrator.

10.28. We recommend that besides the three grades for scientists, there should be provision for appointing outstanding and eminent scientists on a higher salary upto Rs. 3,000 or so. The presence of such scientists in an Institute would not only elevate its status, but also would inspire and induce younger scientist to work harder for higher goals.

Salary of Scientist-Administrators:

10.29. The following categories of staff are included : Dean/Joint Director, Director of Institute, A.D.G., D.D.G. and D.G. These posts should be of a tenure type. The period of tenure should be for five years. A person in this job may get another terms of three years provided he is again selected by the UPSC. Their scales of pay should be the same as that of Principal Scientists, that is Rs. 1100-2000. However, they should be given fringe benefits like free accommodation, car allowance etc. or a lump sum allowance according to the post held by them so that the posts are attractive. The procedure for their selection has been mentioned in Chapter IX. If a scientist who joins any of these posts comes from one of the Institutes of the ICAR, then he should revert to his original post in the Division when the tenure is over and the fringe benefits allowance granted to him should be withdrawn.

Salary of Technical Staff

10.30. The technical staff to be appointed by the Institute may be placed in the grade of Rs. 210-30-450-575. In prescribing this scale of pay, we have taken the precaution of not exceeding the maximum of the existing grade whose merger we are recommending. This scale of pay recommended by us includes the present existing scales of pay of Rs. 325-575, Rs. 335-485, Rs. 325-475, Rs. 250-425, Rs. 210-425, Rs. 210-350 and Rs. 210-380. The post of Research Assistant and Senior Research Assistant should be merged and be designated as Research Assistant. They should be given the scale recommended here. The other technical staff who at present are getting one or the other grades mentioned above should be placed in this grade.

Salary of Supporting Staff

10.31. This category should include Laboratory Assistants, Junior Technicians, Field Assistants, etc. Their scale of pay may be Rs. 100—300. This covers the existing 15 scales of pay for para-scientific staff.

Administrative staff

10.32. The salary of the administrative, ministerial and Class IV staff should be fixed according to the recommendations of the Pay Commission and according to Central Government rules.

Ad hoc appointments

10.33. We have discussed in Chapter V how *ad hoc* appointments have been made indiscriminately. It is a well recognised principle that, where substantive vacancies arise in posts which are to be filled by competitive selection, *ad hoc* appointments (as distinct from temporary arrangement for discharge of current duties) should not ordinarily be made and, if made, should be for a strictly limited duration.

Ad hoc appointments are especially objectionable where the person appointed does not fulfil the minimum requirements of the post. Where such an appointment is continued beyond a reasonable period, the irregularity becomes even more conspicuous.

Lastly, when a prolonged *ad hoc* incumbency of a particular post gives an advantage to the candidate concerned over others appearing in competition with him, the other candidates often entertain the suspicion, whether or not well-founded, that the *ad hoc* appointment itself was a device for giving advantage over them to the person concerned. The least that can be done in such a case, therefore, is that the *ad hoc* appointment should cease as early as possible.

10.34. We recommend that *ad hoc* appointments should be avoided as far as possible. If a post of a Head of Division or Director or any other important post suddenly falls vacant due to resignation or death, the senior-most person in the Division or Institute should ordinarily be made in-charge, or if necessary, an *ad hoc* appointment be made with the consent of the UPSC. The UPSC should convey its approval within one month to this proposal, failing which, the competent authority may make the *ad hoc* appointment for a period not exceeding six months.

CHAPTER XI

WORKING CONDITIONS OF SCIENTISTS

11.1. A scientist can do his research best if he is free to work and can express his views freely and fearlessly. Dr. Shah's main allegation, in his letter, is that the working conditions for scientists are not conducive to research and as we have pointed out in Chapter II, a majority of scientists who gave statements before the Committee, those who met the members of the Committee during their visits to the Institute and those who answered the questionnaire have expressed the same view. Some of the major complaints regarding the working conditions in the Divisions are given below :—

(*i*) The Head of the Division does not give facilities for work. He favours those who work for him.

(*ii*) There is no academic atmosphere as there is no free discussion on research projects and results obtained.

(*iii*) Senior scientists insert their names in research papers even though they do not do the actual work.

(*iv*) Purchase of chemicals, glassware etc. take inordinate delay.

(*v*) Scientists are not allowed to use certain equipments which are available in the Division or in the Institute. For example, the equipments available in the Division of Biochemistry of IARI are not shared by all the colleagues of the Division. The Nuclear Research Laboratory has several equipments which scientists of other Divisions normally cannot use.

11.2. We feel that most of these complaints are genuine and they should be remedied. The working conditions for scientists should be made attractive so that a scientist would be encouraged to engage himself in research rather than engage himself in unacademic activities. So the conditions in a Division should be set right first. Accordingly, the following recommendations are made :

11.3. It has already been recommended that there should be three scales of pay for scientists and they should be designated as Junior Scientists, Senior Scientists and Principal Scientists. Their ratio in each Division may be as far as possible 4:2:1 respectively. Also effort should be made to have at least two Principal Scientists for each Division. At present, each Division has one or only a few Senior Scientists and too many Junior Scientists. Thus, the staffing pattern is base-heavy. Delegation of power, as recommended by us, may not be feasible in such a structure. Moreover, administration should be, as far as possible, horizontal and not vertical. The ratio of scientists, we have recommended here for Divisions, would facilitate working of scientists.

11.4. The post of Head of Division should not be permanently held by a Principal Scientists. This post should be of a tenure type and should normally rotate amongst the Principal Scientists for a period of three years on the basis of seniority except in cases where Divisional Committee and the Director feel otherwise for reasons to be stated. This will give a sense of participation and belonging to the Principal Scientists, all of whom are in the same grade. A Principal Scientist Holding the position of Head of Division can have a second term of office, but no more, if all the scientists of the Division desire so. A Principal Scientist may also have the option of refusing the post of Head of Division. The Head of Division should not receive any additional emoluments. The provision of giving Rs. 150 as a teaching

allowance to Heads of Division of IARI should be immediately stopped. The Principal Scientists should take up the Headship in a spirit of service for fellow scientists and not as a burden.

11.5. The progress of a Division depends on the participation and involvement of all the scientists of the Division. The administration of the Division should be such that all the scientists may be involved in it. This should make them feel that they have something to contribute to the progress of the Division. We, therefore, recommend that each Division should have a Divisional Committee consisting of not more than 12 members representing the three categories of scientists. The actual size of the committee for each Division would be determined by the Director and would be proportionate to the total number of staff of the Division. All Principal Scientists should be members of the Committee, and the remaining number should be shared by the Senior and Junior Scientists in equal number. The Head of the Division should administer the Division in consultation with the Divisional Committee. Rotation of Headship among the Principal Scientists and the constitution of representative Divisional Committee to look after various functions of the Division are our composite recommendations for improving the working conditions of scientists.

11.6. The membership of the Senior and Junior Scientists should be for a period of two years by rotation on the basis of seniority. The recommendation for a shorter tenure of members has been made to ensure that the scientists are able to participate in the working of the Department as frequently as possible. This Committee should also include the Project Co-ordinator of the All India Co-ordinated Project if it is located in the Division, Heads of all the sub-disciplines of the Division and all the Project Leaders if they are not already included. The Committee should meet at least once a month to take stock of all the problems of the Division and to plan for the future.

11.7. The Committee should look after the following matters of the Division :

(*a*) Make proposals for new staff and specify the requisite qualifications for each post.

(*b*) Annual budget which should be divided into three categories—teaching, research and extension. While preparing the budget, separate allocations should be made for each scheme.

(*c*) Purchase of materials and equipment.

(*d*) Recommendations for deputations of staff for seminars and training.

(*e*) Scholarships and freeships for students.

(*f*) Recommendations for registration of students for M.Sc. and Ph.D.

(*g*) Identification of Project Leaders and authors of research papers and the question of publication of research papers.

11.8. The duties and responsibilities of the Division should be distributed amongst the members of the Committee who should hold charge of the same for a period of two years during their membership. The following duties, for example, and any other which the Divisional Committee may decide, may be distributed among its members :

(*a*) Store.

(*b*) Library.

(*c*) Purchase.

(*d*) Class III and Class IV Staff.

(*e*) Time table for teaching institutions.

(*f*) Departmental seminars.

To make this effective, the Head of the Division should authorise the members of the Committee to do all the correspondence and sign the papers on his behalf for specific responsibilities which they are allotted. Signatures of these scientists should be sent to the concerned authorities so that they may be honoured. Such distribution of work will considerably lessen the burden of the Head of the Division, involve most of the scientists in the working of the Division and foster a sense of participation, co-operation and fellow feeling among the staff. This would take off much of the load from the Heads of Divisions, and it would save them from spending a lot of their valuable time in signing routine papers. A Head of the Division is a scientist of high calibre. He should serve as a Head ordinarily for three years and should be back again to his full time research duties. Every effort should be made so that he is not saddled with administrative responsibilities which would keep him away from his academic pursuit.

11.9. Research proposals by individual scientists should be submitted to the Divisional Committee which after scrutiny should be forwarded to the Director of the Institute. When a grant is received, amount allotted for each research project should be kept at the disposal of the Project Leader concerned and this amount should not be used for any other purpose. The Project Leader should have the full authority to spend this amount subject to salutary rules. Thus delegation of financial powers should be made to the actual worker.

11.10. Equipments purchased from divisional grants should be kept in proper condition and should be made available to all the workers of the division. Technicians should be appointed wherever costly equipments are available.

11.11. The present system of maintenance of confidential reports of scientists should be replaced by the following procedure. There should be periodic assessment of the scientists in each category, including that of the Principal Scientists. Each scientist should, at the end of each year, give a summary of his work in a proforma indicating research and teaching work done by him, papers published and difficulties encountered in carrying out the work, to the Head of the Division who should forward it to the Director with his comments. The Director, in consultation with the Executive Council, should have a panel consisting of three expert members for each discipline from the Institute itself who would assess the work. If the report of the panel is unsatisfactory, the Director should then take appropriate disciplinary action according to rules. In extreme cases, termination of service may also be considered. An organisation should not only create proper conditions for the scientists and encourage them to do work, but, it should also have a mechanism by which scientists who are not sincere and devoted to their work are appropriately dealt with. An efficiency bar has been introduced after first five years of service in each of the three grades for scientists. In deserving cases, scientists should be granted suitable advance increments on the basis of the assessment of their work.

11.12. We are constrained to note that there is too much of red tape and financial constraints which hinder research work of scientists. For the purchase of petty things, the procedure followed is so involved and complicated that it frustrates any scientist. We accordingly recommend that subject to necessary salutary rules, financial and administrative powers be delegated not only to the Heads of Divisions but also to the actual scientists whose Project has been approved and who is carrying out the work. Each scientist who has been granted a project should be the final authority to make purchases from the grant. He should be a member of the selection committee for recruiting technical staff of his project. The scientists who do not have research projects should be allowed to share the Divisional grant and equipments on the basis of their needs. This matter should be considered by the Divisional Committee.

11.13. A matter for serious and immediate consideration is the accommodation problem of the staff. It has been brought to our notice that only about 15% of the staff of the IARI have quarters. Furthermore, whereas the senior scientists like Heads of Divitions have bungalows situated in the campus, the

junior scientists, research assistants and laboratory assistants have to hire quarters in the city at exhorbitant rent. Several of these junior workers stay for long hours in the Division and then have to go back a long distance to reach their homes. We recommend that suitable accommodation should be provided in the campuses of the Institutes for 50% of the staff as a first step. A Committee consisting of representatives of various categories of scientists should be appointed in each Institute to allot quarters. We suggest that ordinarily the number of years of service should be the criteria for a person to get quarters in the campus.

11.14. IARI, IVRI and NDRI are teaching-cum-research Institutes. They admit students for M.Sc. (Agri.) and Ph.D. degrees and offer them fellowships. Also a certain percentage of Research Assistants with B.Sc. and M.Sc. degree register for M.Sc. and Ph.D. degree respectively. They work under the supervision of a faculty member and for a particular project. In the other Institute of ICAR only Research Assistants are appointed who also have the scope for promoting their future as mentioned above.

11.15. Post-graduate teaching was introduced in IARI in 1958 when it was accorded the status of a Deemed University. Till then, only R.As. and S.R.As. were appointed to help the scientists. After 1958, the students who registered directly for M.Sc. or Ph.D. degrees also formed a part of the Division and did research work under the supervision of faculty members. Thus there are now too many helping hands for the faculty members. The Committee is of the view that the necessity of such large numbers of R.As. and S.R.As. has decreased after the introduction of post-graduate teaching in these three Institutes. So it is recommended that appointment of R.As. or S.R.As. should be restricted in these three Institutes. The scientists should do research by themselves along with their own students who are registered either for M.Sc. or Ph.D. degrees. In the Institutes other than the three mentioned above, R.As. and S.R.As. may be appointed as at present.

11.16. The Committee is of the opinion that there should be a particular ratio between the research supervisors of different categories and the number of research students who work under them. The following ratio is recommended for scientists who are eligible for supervision of research of post-graduate students.

11.17. Junior, Senior and Principal Scientists should have a maximum of two, four and six students under them respectively. Only when one of the students submits his thesis, the supervisor can take another in his place. If any scientist has a student working under him but registered under any outside University, that student should also be counted within this quota. It is our considered opinion that a research supervisor cannot physically supervise the research work of too many students. Besides, it is also expected that he himself should be an active research worker.

11.18. Only those scientists who have made distinct contribution in carrying out the research work should be the authors of research papers/reports. The Head of the Division or any other person should not associate his name with the paper unless the student is registered under him, or, he has made distinct contribution to the work. Help received from any person from the Division or outside the Division for carrying out the research work should be acknowledged in the paper. As we have already pointed out in Chapter II, we are constrained to say that there is a tendency on the part of senior scientists, particularly Heads of Divisions, to insert their names in the research papers, the work for which is done by junior scientists. The senior scientists should be more benevolent.

11.19. All research students should work on projects which have been approved by the Division. If they wish to be registered under an outside University, their problem of research should be only that which

has been approved by the Division. They should not be allowed to work on a project that does not fit into the programme of the Division and which has been given by the external supervisor.

11.20. At present, a certain percentage of the R.As. and S.R.As. is eligible for registration for higher degrees. It has been noticed that some R.As. are registered for Ph.D. degree under scientists who have only M.Sc. degree. This procedure should be stopped. A student who is registered for Ph.D. degree should work under a scientists who himself has a Ph.D. degree. A student registered for M.Sc. may work under a scientist having an M.Sc. degree. The students should have the freedom to choose the supervisor. The application of students for registration for either M.Sc. or Ph.D. degree should be scrutinised by the Divisional Committee. The student should mention the names of supervisors in order of preference. The Committee should then select the candidates either by interview or written test or both. Allotment of successful candidates to specific supervisors should be made depending on the availability of seats under them on the basis of the quota mentioned above. A student should not ordinarily be assigned to a teacher whose name he has not mentioned.

11.21. There is a craze among the scientists, particularly of the IARI, to register a large number of students under them. It has been noticed that certain scientists who have not successfully guided any Ph.D. student have four to six students registered under them for Ph.D. This practice should be stopped. The number of stdents for each category of scientists as mentioned above should be strictly adhered to.

11.22. There has been a lot of controversy about the faculty membership of scientist. Unnecessary difficulties and confusion have arisen in this regard, particularly in IARI Eligibility for Faculty membership should be as follows :

11.23. For supervising the research of Ph.D. students, the scientist should himself have a Ph.D. degree, should have taught Post-graduate class for two years after he has obtained Ph.D. degree and should have published at least three papers in foreign or Indian journals; abstracts in science Congress or other meetings should not be counted as papers.

11.24. For supervising the work of M.Sc. Students, the scientist should have at least an M.Sc. degree, should have taught for one year in post-graduate class and should have published at least one paper.

11.25. Whether a person is eligible to guide a Ph.D. or M.Sc. Student should be decided in the Division itself and it need not be referred to the Academic Council or any other higher body.

Procedure for publicity of research findings

11.26. The present procedure for publicising the research findings of the ICAR is that (1) the Publicity and Public Relations Sections issue occasional press releases; (2) the sources of their information are the publications of the ICAR and (3) the data are based on the research work of project Leaders and Heads of Divisions and Directors, and the responsibility of checking the data rests with these officers. The Directors of ICAR Institutes and Heads of Divisions in larger Institutes provide material to the press men. In addition, press men also collect information on their own when they attend symposia and lectures, Krishi Vigyan Melas.

11.27. This procedure leaves scope for publicity of data without proper checks. We, therefore, recommend the following procedure in this regard :

Research findings intended to be published through press or radio should first be placed before the Divisional Committee with relevant data. If this Committee feels that the matter deserves publicity, it should pass it on to the Director with its comments. The Director should then himself assess the merits of the data before publicising the said research data.

CHAPTER XII

THE PROBLEM OF THE RESEARCH SIDE STAFF (MINISTERIAL STAFF) OF THE ICAR

12.1. On behalf of the ICAR Employees Welfare Association a delegation of 5 employees appeared for evidence before the Committee on 10-10-72. During the course of evidence, the witnesses stated that the research side staff of the Council has faced a number of disadvantages due to the recruitment policies of the ICAR. The Association was asked to give a detailed memorandum on the subject. The memorandum was submitted by the Association on 28th November, 1972. Comments of the ICAR were then invited and have been received on important points raised in the memorandum.

12.2. It would be relevant to mention here that consequent on the decision of the Government to merge the research institutes under the Ministry of Agriculture with the ICAR, and to convert the ICAR secretariat into an office fully controlled by the Society, several personnel problems came up. On the one hand, the Government staff employed in the Institute was not, in general, willing to opt for the ICAR Society unless reasonable guarantee was given about security of their service conditions. On the other hand, the research side staff, which was by and large located in the ICAR secretariat, resisted the attempts of integrating the Government side staff employed in the ICAR secretariat. The situation in the ICAR secretariat became still more complicated consequent on the Government decision taken in April, 1970, to extend the facility of exercising option for ICAR service not only to those who were actually working in the ICAR secretariat, but to all employees of the Department of Agriculture and its Attached Offices. The employees took recourse to legal proceedings also in this connection.

12.3. The first writ was filed in 1966 by Shri Raliya Ram (Civil Writ No. 266-D/60), an employee of the IARI. In this writ the right of the Government to ask its employees to opt either for the services of the ICAR or to opt out of the Government service according to rules, was questioned. This writ was dismissed by the Punjab High Court in their judgement dated 1-9-66. The second writ was filed in 1970 (Civil Writ No. 788/1970) by Shri Pratul Chandra Tahkur, a Section Officer in the ICAR secretariat. This writ mainly questioned the competence of the Government and the ICAR Society, to give option to all the employees of the Department of Agriculture and its Attached Offices for opting for the services of the ICAR and preventing them from interfering with their seniority and the seniority of the other similarly placed employees of the ICAR. This writ was dismissed by the High Court of Delhi in their judgement dated 7-9-1970.

12.4. Thereafter 4 identical writ petitions (Nos. 88—91 of 1971) were filed by the employees of the ICAR secretariat. These writ petitions also raised more or less the same points as were raised in the writ petition of Shri Thakur. These were also dismissed by the High Court of Delhi on 3rd December, 1971. The employees have filed appeals against the Judgement of the single Bench in these writ petitions and they are still pending in the High Court. The reliefs which have been asked for in these writ petitions are indicated below :—

(*a*) to declare the 'impunged memorandums' [*viz.* dated June 1, 1967, No. F.2-6/66-Reorg. (Admn.); dated April 20, 1970, No. F. 2-6/66-Reorgn. (Admn.)] as illegal, void and unconstitutional;

(*b*) to quash the 'impunged memorandums', mentioned in the prayer (a);

(*c*) to declare the option extended for joining the services of ICAR and any consent thereof as illegal, inoperative and ineffective.

(*d*) to quash the option exercised by Respondents Nos. 4 to for joining the service of ICAR;

(*e*) to restrain the Respondents 1 to 3 or each or any of them, their employees, agents and/or officials from interfering with the seniority of the petitioners in the Indian Council of Agricultural Research to their detriment;

(*f*) to prohibit permanently the Respondents 1 to 3 or each or any of them, their employees, agents and/or officials from interfering, altering and/or disturbing the seniority of the petitioners in the service of the Indian Council of Agricultural Research to the Petitioners detriment;

(*g*) to enforce the rights of the petitioners and other similarly placed employees of the Indian Council of Agricultural Research as aforesaid and to give consequential and ancillary reliefs;

(*h*) to direct the Respondents 2 & 3 to regularise the appointments made on *ad hoc* basis of the Research side staff since 1-4-65;

(*i*) to permit the petition with costs; and/or;

(*j*) to pass such other orders or directions that may be deemed fit and proper.

12.5. The Welfare Association has in all put 12 demands before the Committee. Quite a few of them cover the points which are already subjudice before the High Court of Delhi. The Committee therefore, is not in a position to give any verdict on such demands.

Demands made in the Memorandum

1. The option given to the Govt. Side employees of the Department of Agriculture and its Attached Offices who have not seen the face of the Council for a Single day may be withdrawn and they may be sent back to their own cadres.

12.6. As would be noticed from the list of reliefs claimed from the High Court that this issue has been specifically raised before the High Court, and as such as the Committee is not in a position to make any observations on this.

2. All *ad hoc* promotion made in the ICAR after 1-4-65 to 1-3-70 should be regularised retrospectively as none of the employees in the Govt. side in ICAR and the Department of Agriculture was appointed on *ad hoc* basis. This discrimination might be set aside.

12.7. The ICAR has intimated that all appointments made by way of promotion in the grade of S.O.s Assistants and U.D.Cs. on or after 1-4-65 at the ICAR Headquarters have been made on *ad hoc* basis. Promotions earned by the Govt side staff after 1-4-66 (even regular appointments) will not be, and have not been, taken into consideration by the Council and the individuals will not, and have not been, given benefits of any such regular promotions in the drawing up of the *inter se* seniority lists of the research side staff and the Government side staff as on 1-4-65. After this list is finalised, all regular vacancies meant to be filled by promotion (including those which have been filled on an *ad hoc* basis) will be filled up on regular basis. The question for consideration however, which would arise here is that in case of such employees of the Department of Agriculture and its Attached Offices who, while working outside the ICAR between 1-4-65 and April, 1970 (when they were permitted to give options) had obtained any regular promotion, the ICAR would not be able to annul those promotions and this can create complications in the finalisation of the seniority list and the subsequent regularisation of appointments on the basis of that list. It is very likely that senior staff working under the Department of Agriculture, who may not have got promotions in the Department, might opt for the ICAR where due to their length of service, they would become senior to the members of the Research side staff. It has been stated in the

memorandum that this has already happened in the provisional seniority list circulated by the ICAR as on 1-4-65.

12.8. We find that this prayer has also been made to the High Court and is thus subjudice. We are, therefore, precluded from making observations on this, but in view of the categorical assurance given by the ICAR that for the period after 1-4-65, the research side staff and the Govt. Side staff in matters of nature of promotions would be treated alike, it should be able to meet the demand of the Research Side staff.

3. 80% of the temporary staff of the Council who have been continuing for the last 15 years or so might be made permanent as per orders of the Govt. of India with retrospective effect.

12.9. We find that in the matter of permanency, the Research Side staff has been in a disadvantageous position from the very beginning. At the time the Society came into existence, the intention was not to employ any permanent staff out of research funds. However, as research activities increased, the necessity of employing ministerial and other technical staff specifically for these schemes was also felt, and a large number of people were employed on the research side. The following figures would show the increase in the number of the research side staff employed by the ICAR :

Year	Govt. side	Research side*
1930	50	9
1935	77	56
1940	110	23
1946	79	102
1951	150	114
1954	311	257
1959	411	415
1964	457	640
1967	417	1024
1970	433	950

These employees were recruited under similar recruitment rules as were being followed on the Govt. side, and were also recruited by the same set of officers who were recruiting employees on the Govt. side. The qualifications, etc., were also the same. However, in the matter of service conditions, there were many grave differences.

12.10. The following table would indicate the position regarding the grant of various service benefits to the staff working on the research Side as intimated by the ICAR :

(*i*) *C.P. Fund.*—The Govt. of India approved of the establishment and maintenance by the ICAR of a C.P. Fund for the benefit of the employees of the Council (Research Side) and the Fund actually came into existence with effect from 1-9-44.

(*ii*) *Quasi-permanency.*—The ICAR (Temporary Services) Rules, 1957 were framed, according to which the benefit of the status of Quasi-permanency is conferred upon the eligible members of the staff.

**Sources* : Civil Writ Petition No. 788/1970.

(*iii*) *Permanency.*—The institution of permanency was introduced in the Council with effect from 1-6-61.

(*iv*) *Death*-cum-*Retirement Gratuity.*—The G.P.F. Rules of the Council were amended w.e.f. 1-9-63, so as to make the Councils's employees eligible to the benefits of the D.C.R. Gratuity, along with the benefits of the G.P.F., subject to their fulfilling the requisite conditions.

(*v*) *Pension.*—The Council's employees were given the benefit of the pensionary Scheme of the Central Government w.e.f. 16-11-65. Under the provisions of Bye-law 53 the pensionary liability of the Society's employees retiring from its service is now being met out from the Government grants in each year.

(*vi*) *Medical Facilities.*—The employees of the Council located in Delhi/New Delhi have been made eligible to the medical facilities available to the Govt. employees under the C.G.H.S. from Feb. 1962.

12.11. We are of the opinion that this discrimination in granting legitimate facilities to the Research Side staff, who were working side by side with the Govt. staff, were recruited in the same manner and possessed the same qualifications, was not proper. Most of these facilities have obviously been denied to such members of this category who have already retired. Probably, the Govt. would not like to reopen the cases of these retired employees, but we strongly recommend that steps should be taken to ensure that the present employees do not have to face any disadvantages due to denial of any of these facilities at the appropriate time. As far as conferring permanent status on the employees is concerned, we recommend that posts which continued for the last 5–10 years should be considered for being made permanent according to the orders of the Government and the eligible employees of the Research Side should be made permanent on these posts.

4. All the irregularities so far done while fixing the *inter se* seniority with the staff brought from the erstwhile Commodity Committees might be annulled and all such cases reopened and decided in accordance with the relevant rules applicable to surplus/retrenched staff.

12.12. The erstwhile employees of the Commodity Committees have been given seniority on the basis of their length of service along with the employees of the Government side who have opted for the ICAR and the employees of the Research side. It has, however, been claimed in the memorandum that when a part of the employees of these committees went to the Government, they were not given similar benefits and have been placed at the bottom as far as seniority is concerned. Actually, the benefit of seniority according to length of service has been given only to those few employees of the Commodity Committees who have been absorbed in the ICAR Secretariat. The question of seniority has also been agitated before the High Court and we would only like to suggest that it may be settled by the ICAR in a manner which would be equitable and justifiable to both the categories of employees.

5. No rules and regulations of the Govt. of India might be waived for staff merged with the Council. Every decision might be judged strictly in accordance with the instructions, rules and procedures of the Govt. of India.

12.13. The reference here is with regard to grant of options to the Government side staff and the grant of seniority to the erstwhile employees of the Commodity Committees. These two points have already been covered above.

6. At present there are no avenues of promotion or appointments to ex-cadre posts to the ICAR employees as in the case of Govt. side employees. More higher posts and other avenues of promotions should be created for the Research Side employees who have so far suffered in this regard.

and 10. Adequate supervisory posts might be created afresh for Research Side Service keeping in view the ratio formula of the Ministry of Personnel Affairs on staffing pattern.

12.14. In our recommendations on the future status of the ICAR, we have recommended that the ICAR should be converted into a full-fledged Govt. Department. We have also stressed in that Chapter the necessity of giving adequate consideration to the likely effects of this step on the employees of the ICAR. The Association has stated that in the past the Research Side staff has been discriminated against in the manner of providing supervisory posts on their side. The following figures in this connection are worthy of note :—

Year	Section Officers		Under Secretaries	
	Govt. Side	Res. Side	Govt. Side	Res. Side.
1930	1	..	N.A.	Nil
11-8-35	2	..	,,	,,
1-5-40	3	..	,,	,,
31-3-46	1	..	,,	,,
31-3-51	..	..	,,	,,
30-9-54	10	2	,,	,,
1-1-59	24	8	,,	,,
1-1-64	27	8	,,	,,
1-9-67	28	22	,,	,,
1-4-70	28	24	10	3

12.15. The present position is that after the finalisation of options at the headquarters, all the posts are on the Research Side. There are still some employees from the Government Side whose services have not yet been returned to the Department of Agriculture, and we have been informed by the ICAR that this is being done in a phased manner. At the same time, from the figures it appears that corresponding to their total strength, sufficient number of posts in the supervisory cadres were not made available to the Research Side staff. We would suggest that this problem may be favourably considered by the Govt. and such remedial action for creation of posts in the supervisory cadre for them, as may be considered necessary, should be taken.

7. The officers who have biased views about the Research Side employees and have spoiled the atmosphere of the Council, might be brought to book and immediately transferred.

12.16. No satisfactory evidence has been produced before us to indicate that any officer has particularly held biased views and has thus deliberately caused harm to the research side employees.

8. Large number of employees brought on deputation from Accountant General's offices and other Ministries and Departments of the Govt. of India might be reverted to their parent offices. A policy decision might be laid down in respect of mode of recruitment, number and tenure of deputationists to be followed in future.

12.17. Recourse is taken to bring people on deputation from other offices whenever a new office is set up and trained staff might not be available within the organisation. In our view, this should be done only as a temporary measure and side by side steps should be taken to create a trained cadre within the organisation which might take over from the employees on deputation. In the revised set-up when ICAR becomes a Government Department, the Department would automatically be following the convention being followed in other Govt. Departments with regard to obtaining the services of deputationists.

9. All supervisory posts upto the level of Deputy Secretary might be got vacated from the Govt. officers and suitable officers of the Council's Research Side considered for appointment thereto.

and 11. All ex-cadre posts in the Council's Research Institutes might be closed for the officers of the Central Ministries and Departments and appointments thereto be restricted to suitable officers of the Council Research Side Service only.

12.18. Here also, we feel that the practice being observed in other Government Departments should be followed in the Department of Agricultural Research and Education.

12. In any future reorganisation of the Council from the present autonomous status of a Govt. excluded Department, etc.; the inherent service rights and privileges of the Research Side staff and officers might be safeguarded. They might not be made to lose their existing seniority and promotion prospects any further.

12.19. We have recommended that the ICAR should be converted into a full-fledged Department of Agricultural Research and Education. The difficulty regarding safeguarding the existing status of the employees of the ICAR Society has been discussed in that context also and we have recommended that their status should be suitably safeguarded. We would also like to recommend that before steps are taken to absorb these employees into the Department of Agricultural Research and Education, their pending claims regarding permanency and seniority should be settled. It is only when these issues have been settled that they would be able to join the new set-up in a satisfactory atmosphere without fear of being placed in a disadvantageous position in relation to other employees in and outside the Department. In the Government, seniority is determined on the basis of permanent status and since the Research Side staff has been in a disadvantageous position on this account, it would be necessary to settle this issue.

12.20. We have suggested in the relevant portions of our Report the creation of Grievance Cells and adoption of the Joint Consultative Machinery in the re-organised ICAR. We feel that if the problems of the employees could be discussed across the table with their representatives, there may be no opportunity for them to agitate their demands before courts of law. This is particularly pertinent in the case of the demands of the Research Side staff quite a few of which appear *prima facie*, genuine and deserve sympathetic consideration.

CHAPTER XIII

MAIN RECOMMENDATIONS & FINDINGS

1. In view of the importance of agriculture and the responsibility of the Government to help in the production of proper and adequate food by the people of the country, we recommend that the Government should assume direct responsibility for agricultural research and education. It is accordingly recommended that the ICAR should be made a Department of the Central Government under the Ministry of Food and Agriculture. It may be named "Department of Agricultural Research and Education" (DARE). Adequate steps should be taken to safeguard the status and seniority of the employees of the ICAR. (8.12, 8.13)

We do not approve of idea of establishing an Agricultural Research Commission. (8.22)

2. There should be an Advisory Council for Agricultural Research and Education of which the Minister of Food and Agriculture would be the President. The Council should have representatives from the Centre and States and the tenure of non-official members should be five years.

It would discuss matters of policy pertaining to agricultural research and education, review the progress and problems of agricultural research and education in the country and make recommendations to the Centre and the States. It should have two Vice-Presidents—the Secretary of DARE and the other an eminent scientist who should not be an employee of the DARE (hereafter described as Vice-President I and Vice-President II). It should have a scientist as its Secretary. (8.15)

3. The DARE should have two Executive Committees—(*a*) Executive Committee for Agricultural Research (ECAR) and (*b*) Executive Committee for Agricultural Education (ECAE). The tenure of the members of these two Committees, except ex-officio members, should be five years. (8.16—8.19)

There should also be a Co-ordination Committee for the Ministry of Food & Agriculture whose function would be to co-ordinate the work of the various departments under the Ministry of Food & Agriculture. (8.20)

4. The Secretary of DARE (Vice-President I) should be the Chairman of the ECAR. Its total membership should be 15 which would include the Chairman of ECAE, some representatives from DARE and its Institutes, and State Governments. It should also include some agricultural experts and some Vice-Chancellors of Agricultural Universities. It would be concerned with matters such as determination of priorities for research, selection and allotment of funds for project-oriented and time bound applied research to the Institutes of DARE, Agricultural Universities and administration of All India Co-ordinated Projects. The Committee should have a scientist as its full-time Secretary. (8.16, 8.17)

5. The Vice-President II of the Council should be the Chairman of the Executive Committee for Agricultural Education. Its total membership would be 15 and it would include the Chairman

of ECAR, some Vice-Chancellors of Agricultural Universities and some representatives of DARE. The Chairman would be directly responsible to the Minister. (8.18, 8.19, 9.10)

The functions of ECAE should include allotment of funds for teaching and research to Agricultural Universities and the IARI, IVRI and NDRI. The funds should be allocated to Universities and to the Institutes on assessment of their needs, potential and capabilities, review of curricula for teaching at various stages and maintenance of standard of agricultural education; etc. It should have a secretariat headed by an agricultural scientist and should include specialists for various relevant aspects of agriculture. The Committee will allocate to the IARI, NDRI and IVRI maintenance grants on the existing basis for their teaching requirements. (9.11)

6. The Institutes of DARE should have autonomy in financial and administrative matters. Each Institute should have an Executive Council and the Director of the Institute should administer its affairs in consultation with this Council. Once allocation of funds is made, the Institute should have full authority for its expenditure subject to salutary rules. Financial and administrative powers should be delegated to Heads of Divisions, Project Leaders and the research scientists to ensure speedy implementation of research work. (8.23—8.28)

7. The system of joint consultative machinery operating in the Central Government Departments should be implemented in DARE.

In each Institute there should be a 'Grievance Cell'. It should have three to five members nominated by the Executive Council and would select its own Chairman and devise its procedure in accordance with the principles of natural justice.

In regard to the three large Institutes—IARI, IVRI and NDRI—the same procedures may be followed in each Division. (8.29)

8. The staff under DARE and its Institutes should be classified into four categories, *viz.*, (10.23)

(*a*) Scientific,

(*b*) Technical,

(*c*) Supporting,

(*d*) Administrative.

The number of grades should be reduced. There should be only three categories of scientists and three corresponding scales of pay. We have deliberately tried to reduce the number of grades but in prescribing the salaries for these grades, we have taken the precaution of not exceeding the maximum of the existing grades whose merger we are recommending : (10.23—10.32)

(*i*) Junior Scientist . . . . — Rs. 400–40–600–EB–50–950

(*ii*) Senior Scientist . . . . — Rs. 700–50–1050–EB–75–1400

(*iii*) Principal Scientist . . . — Rs. 1100–60–1400–EB–100–2000

(*iv*) Higher pay for eminent scientists.

9. The selection for these four categories of scientists should be made through UPSC. We recommend that the UPSC should have a science wing for this purpose. The wing should have three scientist members, one of whom should have the status of Vice-Chairman of the UPSC. There should be at least two experts in the field in each selection committee. Once a year the UPSC should receive suggestions of names for the Panel of Experts for each discipline from DARE and the Divisions of Institutes.

This arrangement of recruitment through UPSC would be implemented for five years after which the matter may be reviewed. (10.8)

10. The recruitment of junior scientists should be made annually as outlined in Chapter X. 25 per cent of posts in this grade should be reserved for selection from the research assistants by the UPSC. All posts above junior scientists should be filled by open recruitment. (10.9—10.13)

11. There should be an efficiency bar in each of the three grades of scientists after first five years of their service. (11.11)

12. In exceptional cases there should be provision for appointing outstanding scientists on a tenure basis by giving them higher pay beyond the grade of Principal Scientists. (10.28)

13. The existing grades of Research Assistants and Senior Research Assistants should be merged and be re-named Research Assistant, which should have a pay scale of Rs. 210–575. (10.30)

14. The Research Assistants should be selected by the respective Institutes through selection committees to be constituted for each post or category of posts. The committee should be presided over by an outside expert. (10.18, 10.19)

15. The recruitment to the posts of Directors of the Institutes, A.D.Gs. and D.D.Gs. and similar posts should be made through UPSC by open advertisement. These appointments should be made for a term of five years. The existing permanent incumbents of these posts should be given the option of returning to research positions in the Institutes. Their present salaries would be protected in such cases. On the expiry of the term, a person may be given another term not exceeding three years, if he is selected by the UPSC. Their scales of pay should be the same as that of Principal Scientists. However, they may be given fringe benefits like free accommodation, car allowance etc. or alternatively a lump sum allowance. (10.14, 10.16, 10.29)

16. *Ad hoc* appointments should be stopped as far as possible. If a post of a Head of Division or Director or any other important post suddenly falls vacant due to resignation or death, the senior-most person in the Division or Institute should ordinarily be made in-charge or, if necessary, an *ad hoc* appointment be made with the consent of the UPSC. The UPSC should convey its approval within one month to this proposal, failing which, the competent authority may make the *ad hoc* appointment for a period not exceeding six months. (10.33, 10.34)

17. The post of Head of the Division should be held by Principal Scientists of the Division for a period of three years each and it would normally go by rotation amongst the Principal Scientists on the basis of seniority, except in cases where the Director and the Divisional Committee decide otherwise

for reasons to be stated. No allowance should be given to the incumbent for holding this post for the period. (11.4)

18. The Head of the Division shall administer the Division in consultation with a Divisional Committee. The Divisional Committee should consist of not more than 12 members. The actual size of the committee would be decided by the Director. All Principal Scientists of the Division should be on the committee and the remaining number will be divided half and half among the Junior and Senior Scientists. The function of the Committee would be as described in Chapter X. The members of the Committee representing Junior and Senior Scientists should hold office for a period of two years by rotation on the basis of seniority. (11.5—11.8)

19. The present system of maintenance of confidential reports of scientists should be replaced by the following procedure. Each scientist should mention the work done by him in the preceding year in a proforma and forward it to the Head of the Division. The Head of the Division should forward the proforma along with his comments to the Director of the Institute. The Director should place the proforma along with his comments before a small internal sub-committee for the special discipline to be nominated by him in consultation with the Executive Council. (11.11)

20. Scientists who have made a distinct contribution in carrying out the research work should be the authors of research papers/reports. Research work carried out in the Division should be first presented in a seminar of the Division before publication. (11.18)

21. Research findings intended to be publicised through press or radio, should first be placed before the Divisional Committee with relevant data. If this Committee feels that the matter deserves publicity, it should pass it on to the Director with its comments. The Director should then himself assess the merits of the data before publicising the said research data. (11.26)

22. Working conditions for the scientists in the campuses should be improved. The following steps should be taken in this regard. Sufficient number of quarters for junior scientists and other workers should be built. Liberalisation of financial rules should be made to enable individual scientists to make purchases of equipment, chemicals etc. from their grant; freedom to the scientists should be given to use the equipment and resources of the Division and the Institute. (11.10, 11.12, 11.13)

23. Principal, Senior and Junior Scientists should not have more than 6, 4, 2 research students respectively at a time including M.Sc. and Ph.D. students. The research students should have the option of selecting their supervisors. (11.17)

24. The Panel of Advisers has suggested the following improvement in the method being followed by the Ministry of Agriculture for release of new varieties of seeds. (7.59)

(*i*) In the proforma for describing the quality of seed, both the favourable and unfavourable aspects of the seed should be mentioned :

(*ii*) Record of experiments carried out under various projects should be kept properly and scrutinised by supervisors and experimental data should be assessed by competent statisticians.

We endorse these recommendations made by the Panel. (7.45—7.59)

Findings on allegations made by Dr. Shah in his letter :

25. The Committee has considered the report of the Panel of Advisers and records its findings as follows :

25.1. (i) *Large-sized seed potato has been used to show high yields :*

This allegation of Dr. Shah was about the experiments conducted in the IARI. The Panel of Advisers has observed as follows about the records maintained in the IARI regarding these experiments—

"We were able to obtain from the Director, IARI the Field Note Books on these experiments. We regret to say that the field records in these books are extremely unsystematic and that the books are more in the nature of scribbling-pads. The physical condition in which they are preserved is also not good. The yields recorded in these books broadly tally with those published in the above mentioned publication; but the difference though negligible is nowhere explained. Regarding the size and quantity of seed used, we could locate only one entry in the note book for the year 1969-70. It indicates that 15 quintals/hectare seed of Kufri Alankar was planted. The experiments were conducted presumably on 1/46 hectare plots. The notebook does not record the actual quantity of seed used in the specific experiments. We consider this quite unsatisfactory manner of recording of experimental data."

The Panel, however, has further gone into the matter and collected data on similar experiments conducted in different States. They have concluded on the basis of those records that the range in the size of the seeds used in the IARI experiments was not particularly large. The Panel has also observed that the yield obtained in the IARI experiments do not appear to be exceptionally high. They have accordingly concluded as follows : "Therefore, on the strength of the evidence before us, we do not think that Dr. Shah's allegation that 'in relay cropping, a very large-sized potato seed was used to show yields' can be sustained".

We endorse the observations made by the Panel of Advisers. (7.45, 7.46)

25.2. (ii) *Baisakhi moong did not prove successful in National Demonstrations :*

The Panel has found that Dr. Shah's allegation about the exaggerated claims made in respect of the yield of Baisakhi moong has some substance. We agree with the observations made by the Panel. (7.47, 7.48)

25.3. (iii) *Slow release N fert, or nitrification inhibitors did not find experimental validity :*

The Panel has observed "Dr. Shah's allegation that the work 'did not find experimental validity anywhere else in the country' cannot therefore be sustained. Moreover, it seems that the work is still in the exploratory stages."

We agree with the observations made by the Panel. (7.49, 7.50)

26. *Findings on additional items referred to the Panel of Advisers.*

26.1. (i) *A new strain of maize having its protein and lysine content doubled :*

The Panel has observed as follows regarding the allegation made about the quality of a new strain of maize.

"It is obvious, therefore, that there has been a certain confusion in public mind regarding the claims of the high lysine maize because of a failure to see the difference between protein content and lysine

content. In this, the scientists of the ICAR are not entirely free of blame. The subject also appears to be somewhat over-advertised."

We agree with the observations made by the Panel. (7.51, 7.52)

26.2. The Panel has found that the claim that Sharbati Sonora has high lysine content is not substantiated.

We agree with the observation made by the Panel. (7.53—7.55

26.3. The Panel has found that the allegation made about the exaggerated claims of the high yield of Bajra and the quality of Sabarmati Rice, are not correct.

We agree with the observations of the Panel. (7.56—7.58)

27. *Findings on other statements made by Dr. Shah.*

27.1. In regard to the other allegations made by Dr. Shah in his letter, expressing his dis-satisfaction and resentment against the atmosphere prevailing in the Campus and several unworthy events taking place thereon, the Committee has come to the conclusion that the general nature of the complaints made by Dr. Shah is justified. However, in regard to several specific statements, such as in paragraphs 3(a), (b) and (c), no evidence has been produced before the Committee. (7.62, 11.1, 11.2)

27.2. In regard to the appointment of Dr. Rajendra Prasad as Professor of Agronomy, the Committee has come to the conclusion that the appointment of Dr. Rajendra Prasad as Professor of Agronomy is justified. (7.37—7.41)

27.3. In the light of all the relevant facts to which the Committee has given anxious consideration, the Committee has come to the conclusion that there are several aspects pertaining to the appointment of Dr. De as Head of the Division of Agronomy which must be regarded as unsatisfactory and, therefore, casting doubts on the propriety of this appointment. The Committee, therefore, concludes that the appointment of Dr. De as Head of Division of Agronomy was not properly made. (7.8—7.36)

P. B. Gajendragadkar

D. S. Kothari

H. N. Sethna

B. Venkatappiah

B. D. Nagchaudhuri

M. S. Kanungo

APPENDICES

APPENDIX I

COPY OF LETTER OF LATE DR. V. H. SHAH HANDED OVER BY POLICE ON 5-5-72

My dear Dr. Swaminathan,

It has become impossible for me to bear the happenings around me in the recent past.

1. It is too much of a struggle to get a better opportunity. As I had indicated you on 3-5-72. I have been disowned by crops (Breeding) men as well as by agronomy men in authority.

2. Whenever it suits some one seniority counts in the same line, at other times seniority, contributions, basic qualifications, capacity to inspire intelligent young scientists etc. are completely ignored, *e.g.* the appointment of Dr. De as Head of the Division of Agronomy, Selection of Dr. Prasad as Professor of Agronomy (Man with qualifications in Plant Physiology and Soil Sciences).

3. Head of Divisions and/or Professors would kill the incentives of Section Officers in the following way (as it heppened to me.)

(*i*) Not admitting him to the P.G. Faculty for a long time.

(*ii*) Not giving him students.

(*iii*) Supporting BAS, SRAS, Fieldmen etc. against the Section Officers in indisciplines, failures to do the duties properly, putting them with dual authority etc.

I was not given *ad hoc* appointment to my present post when nobody else senior to me had any experience in maize—No *ad hoc* appointment as Professor because I could get it.

4. Creating such an atmosphere that Section Officer is always to be blamed even when he is doing everything in the interest of the work.

5. Section Officer could not complain else the matter will be directed against him. To quote Dr. Bains "The subordinates will put tons of false charges against you and you would not be able to stop them or correct them."

6. A lot of unscientific data are collected and passed on to you to fit to your line of thinking, *e.g.*, in relay cropping very large sized seed potato was used to show high yields. Who still know, basides some persons in Agronomy, that it is highly uneconomical to grow. Why is it that so much publicised Baisakhi Moong did not prove successful in National Demonstrations.

7. Why is it that so much praised work with slow release H fert. or Nitrification inhibiters did not find experimental validity anywhere else in the country.

8. A person with ideas and constructive scientific critic is always victimised, whenever it comes to promotion or getting importance.

Even in the achievement audit reports the contribution made by the section as well as programme of future work were changed so that they do not appear outstanding.

9. Administrative bottlenecks are so many and are often humiliating.

10. Director or Director-General seldom likes to hear complaints against Head of the Division or Professor.

Mediocre people are also recruited in preference to candidates with experience, energy and drive —because they have tact to keep the higher authorities close to them by fair or foul means, *e.g.*, Dr. J. Singh.

I think the time has come again that a scientist will have to sacrifice his life in disgust so that other scientists may get proper treatment.

May I bid you good-bye and many more years of dedicated life ? I have only one request to make you may kindly guard the interest of the persons dedicated to work with intelligence. Dr. Mahapatra, myself, Dr. Dastane, Dr. Bhardwaj, Dr. Sadaphal, Dr. Panda, etc. are struggling hard against heavy onslaught mentally as well as administratively. You may be supporting mediocre and pseudo-agronomists at the expenses of intelligent agronomists.

Wishing you all the best.

Yours sincerely

Sd/- V. H. SHAH

APPENDIX II

QUESTIONNAIRE

PART I

To be answered by Directors of Institutes under ICAR and of other Institutes.

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1. (*a*) Name of the Institute.
   (*b*) Year of Establishment.

2. (*a*) Objective of the Institute.
   (*b*) Brief history of Institute (about 10 lines).
   (*c*) Details of relationship, if any, with the ICAR in respect of finance, research and any other relevant matter.

3. Total strength of staff in different categories. *Permanent* *Temporary*

   (*i*) Teaching.
   (*ii*) Research.
   (*iii*) Administration.
   (*iv*) Supporting staff.

4. (*a*) What are the outstanding contributions of the Institute/Department during the last five years ?
   (*b*) How can such achievements be further improved in volume/quality ?
      (*i*) Research.
      (*ii*) Training.
      (*iii*) Extension and application of results.
   (*c*) What are the major difficulties in increasing the output of work ?
      (*i*) Organisational and administrative.
      (*ii*) Competency and adequacy of scientific staff.
      (*iii*) Competency and adequacy of supporting staff.
      (*iv*) Adequacy of equipment, laboratory and field facilities.
   (*d*) Please suggest methods for improving the speed and effectiveness of the field applications of results of research.
      (1) How to minimise ?
         (*i*) Non-productive effort
         (*ii*) Premature publicity and application,

S/4 M. of A/72—14.

(2) Promotion of effective contacts:

(*i*) between laboratory scientists and field workers and farmers;

(*ii*) interdisciplinary work in the institution and between institutions;

(*iii*) between ICAR institutions and other institutions.

5. *Recruitment :*

(*a*) What is your present method of recruitment ?

(*b*) What in your view are the major defects in the present system ?

(*c*) What in your view should be the methods of recognising performance of scientists?

(*d*) What should be the method of planning the careers of your scientists in accordance with their aptitudes and performance ?

(*e*) Please give your suggestions regarding career planning of scientist.

(*f*) Are you in favour of retaining the present grades structure of reducing it or expanding it (that is more grades) ?

(*g*) Are you in favour of selection by UPSC, or UPSC and ICAR jointly, or Board of ICAR as at present, or a separate Union Scientists Service Commission, or any other ?

(*h*) What should be the composition of selection committee ?
(*i*) the proportion of internal and external members;
(*ii*) who should select the experts ?

(*i*) Do you consider that promotion/selection should take into account continuing evaluation of the work of a scientist ? If yes, how should such an evaluation be made and what weightage should be given to it in determining promotion/selection ?

(*j*) Do you consider that selection should be —

(*i*) entirely by continuing internal assessment by superiors;

(*ii*) external assessment only;

(*iii*) both internal and external.

6. In case of temporary schemes, what happens to the scientists after the scheme terminates?

(*a*) Services terminated;

(*b*) Absorbed in other schemes;

(*c*) Give suggestions to avoid such loss of experience.

7. Please give your comments and opinion on the points mentioned by late Dr. Shah in his letter addres ed to Dr. M.S. Swaminathan (Annexure II).

8. Any other suggestions or comments relevant to the terms of reference (Annexure I).

PART II

To be answered by Heads of Department/Division

1. Name of the Department

2. Staff

Category	*No.*	*Permanent*	*Temporary*
Class I			
Class II			

3. Please give details of your teaching and research staff as follows:

Name	Present position with year of joining	Qualifications	Specialisation	Any outstanding achievement

4. What is the objective of the Department?

5. What is the future plan of the Department?

   (*a*) Please submit a copy of the future plan.

   (*b*) Who made the plan—

   (*i*) ICAR

   (*ii*) You

   (*iii*) You in consultation with colleagues.

6. How are the scientific programmes managed in your Department?

   (*a*) Does each scientist have his own equipments or the equipments are kept in common pool ? How do you ensure that the scientists get the equipments when they need ?

   (*b*) Is there any co-ordination among the scientists of your own Department and the available facilities shared by all concerned ?

   (*c*) Do you have programmes which are performed jointly by two or more Departments ?

   (*d*) Who decides about the research projects of each staff ?

   (*i*) You alone.

   (*ii*) You in consultation with other members of the staff ?

   (*iii*) Each individual member.

7. Is your workload as Head of Department too much ?
If yes,

Would you like to delegate some powers to an administrative committee ? Yes/No

If yes,

(*i*) Who should appoint the Committee ?
(*ii*) What should be its composition and members ?
(*iii*) What should be its tenure ?
(*iv*) What powers should it have ?

If no, state the reasons.

8. Would you like to have the Headship rotated among other members of the staff ?
If yes,

(*a*) among professors only
(b) among professors and associate professors
(c) among Class I staff only
(*d*) among Class I and Class II staff

If no, state the reasons.

9. Do you guide the research of all staff of your Department or the individual scientists are independent as far as research is concerned ?

10. Please furnish a list of research papers with the names of authors and journals published by your Department during the last five years.

11. Have there been instances of research workers of one specialisation going over to another specialisation or from one commodity to another commodity ?

If so, give instances and reasons

(*a*) Number

(*b*) Reasons

12. Please give your suggestions for eliminating inefficient scientists ?

13. Please give your comments on the points raised by late Dr. Shah in his letter addressed to Dr. M. S. Swaminathan (Annexure II).

14. If you have any other suggestions in respect of the terms of reference of the Committee for improvement of the ICAR and the organisations under it, please mention them.

PART III

To be answered by Teaching and Research Staff/Heads of Departments

1. Name and designation

2. Educational qualifications

Degree	Year	University	Subjects	Specialisation	Any notable achievements
B.Sc.					
M.Sc.					
Ph.D.					

3. Details of employment, past and present (Mention clearly if any of them have been under the ICAR).

4. Temporary or Permanent

5. (*a*) Do you like to have the Headship of the Department by rotation: Yes/No

   (*b*) If yes,

   (*i*) Should it rotate among the professors only or professors and other Class I staff ?

   (*ii*) What should be the tenure of appointment ?

6. (*a*) Should the administration of the Department be done entirely by the Head of Department or should there be a Departmental Committee with the Head as ex-officio Chairman ? Head of the Department/Departmental Committee

   (*b*) If by Departmental Committee, how many members should it consist of ? 5/less than 5/proportionate to the number

   (*c*) Should only professors be included in the Committee, or representatives of Class I and Class II staff ? Professors only/Professors and other staff

   (*d*) (*i*) Should the membership rotate on seniority basis ? Yes/No

   (*ii*) If not, can you suggest other criteria? (Such as one each from various desciplines).

   (*e*) What should be the tenure of the Committee ? Permanent/2 years/any other

(*f*) What should be the function of the Committee ? (Delete or add as desired)

1. Development plan for staff, space, equipment etc.
2. Proposal and allocation of funds under annual budget.
3. Purchase of materials and equipment.
4. Recommendation for the advertisement of various posts.
5. Recommendation for promotion of staff.
6. Allocation of research scholars and teaching work.
7. Any other.

7. (*a*) Should there be promotion to next higher post irrespective of a vacancy ? Yes/No

(*b*) If yes, should it be by seniority or merit ? Seniority/merit

(*c*) If by seniority, then after what interval ? 5 yrs./7 yrs./10 yrs.

(*d*) If by merit, then after what interval ? 5 yrs./7 yrs./10 yrs.

(*e*) Should the merit be assessed by a Committee of Experts ? Yes/No

(*i*) If yes, should the experts be external only/internal only/both ? External only/internal only/both

(*ii*) If no, what are your suggestions ?

(*f*) Would you prefer a running scale with provision for advance increments in case of meritorious research work ? Yes/No

8. (*a*) Would you favour periodical (3–5 yrs.) assessment of the work ? (teaching and research) Yes/No

(*b*) If yes, should it be by a Committee of experts consisting external members only or internal members only or both ? External/Internal/both

(*c*) On the basis of assessment would you favour:

(*i*) Advance increments if work is highly commended. Yes/No

(*ii*) Increments to continue if work is satisfactory; Yes/No

(*iii*) Increment to be stopped if work is not satisfactory; Yes/No

(*iv*) Dismissal from the post if the work is bad. Yes/No

9. Are you satisfied with the present mode of selection in the ICAR. If not, please suggest methods for improvement under the following:

   (*a*) Relevance of Selection Committee, its composition, selection of experts, presence of Departmental authorities;

   (*b*) Relevance and quality of research and teaching;

   (*c*) Mode of advertisement, scrutiny of application;

   (*d*) Purpose and relevance of the post in the light of future of Department and who should decide this;

   (*e*) Is interview necessary for selection of all posts ? If not, why ? If yes, for all posts or only some categories ? What other method should be adopted if you do not favour interview ?

   (*f*) Should the faculty or Institute or both participate in the actual selection procedure ? If yes, how ? If no, state the reasons.

   (*g*) How much benefit should be given for qualifications, seniority and performance respectively ?

   (*h*) Any other suggestions for evaluation of performance of scientists.

10. Would you like the appointment to be made of a tenure type for period of 2 years ? The appointment to be renewed if the work is good, otherwise cancelled. If yes,

   (*a*) Who should decide whether the work is good or bad ?

   (*b*) Should such appointments be made at all levels or only at particular levels ? Specify. If no, give reasons.

11. Are you satisfied with the opportunities available for work ? If not, please state the difficulties in:

   (*a*) Teaching;

   (*b*) Independent research grant.

   (*c*) Freedom to carry out your research. If you have any difficulties in this matter, please mention them and suggest remedial methods.

   (*d*) If you have an original research problem and you do the entire work, are you free to publish it in your own name or you are required to have the Head of the Department or Director or any superior as a co-author ?

   If a superior has actually suggested the problem and supervises the work, he should be a co-author of the paper. Yes/No.

(*e*) Do you or your supervisor send the manuscript directly to a journal for publication, or it is scrutinised by other authorities ?

(*f*) Do you get your data scrutinised by competent statisticians before establishing its validity ?

12. Do you have research problems involving two or more Departments ?

(*a*) If yes, how such co-ordination is done ?

(*b*) Do you have difficulties in using the equipments and materials of other Departments ?

(*c*) Do you have difficulty in using the equipments and materials of your own Department ?

13. Have there been instances of research workers of one specialisation going over to another specialisation or from one commodity to another ? If so, give instances and reasons:

(*a*) Number

(*b*) Reasons.

14. Please suggest methods for enforcing high standards of efficiency in selecting, promoting and retaining good research scientists.

15. Please suggest methods for eliminating those scientists who are inefficient.

16. Please give your comments on the points raised by late Dr. Shah in his letter addressed to Dr. M. S. Swaminathan (Annexure II).

17. Do you wish to appear in evidence before the Committee ? If so, please state the reasons.

18. Any other relevant information which may be useful to the Committee in the framing of its recommendations in respect of the terms of reference (Annexure I).

NOTE :—Any person with knowledge and experience having a bearing on the terms of reference of the Committee may give this suggestions and comments.

APPENDIX III

CIRCULAR ISSUED BY MINISTRY OF AGRICULTURE

No. 44011/32/72-E-I

GOVERNMENT OF INDIA

MINISTRY OF AGRICULTURE

(Department of Agriculture)

New Delhi, the 11th August, 1972.

MEMORANDUM

SUBJECT :—*Committee of Inquiry, Indian Council of Agricultural Research.*

A high-level Committee under the Chairmanship of Dr. P.B. Gajendragadkar, retired Chief Justice of India, has been set up by the Government of India *vide* its Resolution No. 24-1/72-Genl. Coord. dated the 27th June 1972. The following are the terms of reference of the Committee :—

(*i*) To examine the statements and incidents mentioned by Dr. Shah in the letter of May 5, 1972, addressed by him to the Director General, Indian Agricultural Research Institute, New Delhi, before Dr. Shah committed suicide.

(*ii*) To review the recruitment and personnel policies of the Indian Council of Agricultural Research Institutes and Centres working under it, and to suggest measures for their improvement.

(*iii*) To consider any other relevant matters which, in the opinion of the Committee, would help it to make effective recommendations.

2. The Committee desires that the officers and the staff working in and under the ICAR should express their views freely to the Committee and Government agree that all concerned should cooperate with the Committee in its enquiry.

3. Attention in this connection is, therefore, drawn to the provisions under Rule 10(3) of the C.C.S. Conduct Rules 1964 which are also applicable *mutatis mutandis* to the officers and staff of the Council on the Research Side. Under the provisions of this Rule, the Government servants are free to give frank expression to their personal views to the Committee. No permission of Government or of the Head of the Department is required for this purpose. But evidence tendered before/or any information furnished to the Committee must not be given publicity as that would amount to public criticism of Government or unauthorised communication of information, *vide* Rules 9 and 11 of the C.C.S. Conduc Rules 1964.

4. Government servants are also free to submit memoranda, of their own accord direct to the Commission, on any subject included in their terms of reference. In such memoranda, Government

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servants can give frank expression to their personal views; but the views so expressed should not be given any publicity, Care should also be taken to ensure that any memoranda/information etc., do not reach any person/authority other than the Inquiry Committee.

Sd/-
(T. P. Singh)
Secretary to the Government of India.

To

All officers and staff working in and under the ICAR

Copy to the Member Secretary, Committee of Inquiry, ICAR, Krishi Bhawan, New Delhi.

APPENDIX IV

List of Members of Parliament who appeared before the ICAR Inquiry Committee.

1. Shri Y. P. Sathe
2. Shri K. S. Chavda
3. Shri K. C. Panda
4. Shri J. B. Patnaik
5. Shri Dayabhai V. Patel
6. Shri Loknath Misra
7. Shri S. Banerjee
8. Shri Krishan Kant
9. Shri K. D. Malaviya
10. Dr. Henry Austin
11. Dr. K. Ramiah
12. Shri B. K. Chakravarty
13. Shri Bharat Singh Chauhan
14. Shri M. Ramgopal Reddy
15. Shri Piloo Mody.

APPENDIX V

ANSWERS TO QUESTIONNAIRE

Number of Answers Received

Part I (Directors etc., etc.)		
Directors	31	
D.D.G.	1	
A.D.G.	1	
Coordinators	1	
Outside Scientists	17	
Total		51
Part II (Heads of Divisions, etc.)		
I. Coordinators	17	
II. ICAR Scientists	106	
III. Outside Scientists	38	
Total		161
Part III (Teaching, Research and other staff)		
I. Directors	2	
II. D.G.	1	
III. D.D.G.	1	
IV. A.D.G.	7	
V. Scientists (Class I & II)	1392	
VI. Scientists (Class III)	452	
VII. Non-Scientific Staff (Class III & IV)	378	
Outside ICAR — VIII. Outside Scientists (Class I & II)	194	
Outside ICAR — IX. Scientists (Class III)	19	
Outside ICAR — X. Non-Scientific (Class III & IV)	20	
Total number of answers received		2667

APPENDIX V—(*contd.*)

PART I

Q. No.	Question	Answer Directors and Head of Institutions	ICAR	Outsiders	Total
1	2	3	4	5	6
4.*b*.	How can the following achievements be improved				
	(*i*) *Research*				
	1. More funds	8	1	7	16
	2. More staff	13	2	5	20
	3. Proper space	1	..	1	2
	4. Lab., Lib etc. facilities	18	..	4	22
	5. Others	19	..	5	24
	(*ii*) *Training*				
	1. More funds	4	..	3	7
	2. More staff	7	1	1	9
	3. Fellowships	2	..	..	2
	4. New training courses/training to staff	15	1	8	24
	5. More facilities	8	..	1	9
	6. Others	4	..	3	7
	(*iii*) *Extension*				
	1. Training to staff	3	..	2	5
	2. More facilities	10	1	5	16
	3. More staff	9	2	7	18
	4. Demonstration in village areas	6	..	2	8
	5. Others/Liaison with States etc.	6	2	2	10
4.*c*.	Major difficulties in increasing the output work				
	(*i*) Organisation & administration				
	Yes	27	3	7	37
	No	3	..	7	10
	(*ii*) *Supervisory staff*				
	1. Competency				
	Yes	12	1	..	13
	No	6	2	12	20
	2. Adequacy				
	Yes	16	1	6	23
	No	5	1	7	13

1	2	3	4	5	6
	(*iii*) *Supporting staff*				
	1. Competency				
	Yes	8	..	1	9
	No	10	2	13	25
	I. Adequacy				
	Yes	12	2	5	19
	No.	9	1	10	20
	(*iv*) Adequacy of equipment, lab. and field facilities				
	Yes	25	1	10	36
	No	2	1	4	7
	4.*d*. Methods for improving the speed and effectiveness of the field application of results of research.				
	(*i*) *How to minimise ?*				
	1. Non-productive effort				
	A. Project scruitiny	15	3	5	23
	B. Projects/on priority basis . . .	4	..	3	7
	C. Others	5	..	4	9
	2. Premature publicity and application				
	A. Results be tested before publicity . .	18	2	6	26
	B. Scrutiny by a Committee/Directors Scientist etc.	6	1	3	10
	C. Others	2	..	1	3
	(*ii*) Promotion of effective contacts				
	1. Bet Lab. Scientist, field worker and farmers				
	A. Field days/workshops/Seminars etc. .	21	..	5	26
	B. Annual training for field workers . .	4	..	..	4
	C. Demonstration on farmer field . .	10	3	4	17
	D. Both be involved in extension . .	4	..	2	6
	E. Adult education for farmers and others .	5	..	1	6
	2. Interdisciplinary work in the institution and between institutions.				
	A. Coord, projects	18	2	4	24
	B. Seminar/Workshops	7	..	3	10
	C. Facilities for visiting other institutes .	4	1	1	6
	D. Others	2	..	2	4

1	2	3	4	5	6
	3. Between ICAR Institutions and other institutions				
	A. Coord projects	12	..	2	14
	B. Seminar/Workshops Mutual discussion	9	1	2	12
	C. Others (freedom etc.)	10	2	5	17
5.*f*.	Are you in favour of				
	1. Present grades	..	..	1	1
	2. Reducing it	27	2	9	38
	3. Expanding it	..	..	3	3
5.*g*.	Are you in favour of selection by				
	1. U.P.S.C.	4	..	..	4
	2. U.P.S.C. & I.C.A.R.	1	..	2	3
	3. I.C.A.R. Board as at present	10	1	6	17
	4. Separate Union Scientist Service	12	..	4	16
	5. Any other	4	2	2	8
5.*h*.	Composition of Selection Committee				
	(*i*) Proportion of Internal and external members				
	1. Internal-External	12	1	7	20
	2. Internal-External	3	1	..	4
	3. Internal-External	9	..	5	14
	4. Entirely-External	3	..	..	3
	5. As at present	1	..	1	2
	(*ii*) Who should select the experts ?				
	1. D.C.	3	..	2	3
	2. D.G. & Director	11	2	4	17
	3. Head of Div. & Director for Jr. Posts	2	..	1	3
	4. As at present	2	..	..	2
	5. Union Scientific Services Commission	3	1	1	5
	6. Chairman of Commission & D.G., I.C.A.R.	1	..	..	1
	7. U.P.S.C.	2	..	..	2
	8. Others	3	..	5	8

1	2	3	4	5	6
5.*j.*	Do you consider that selection should be				
	1. Entirely by continuing internal assessment by superiors	5	1	..	6
	2. External Assessment only	2	..	1	3
	3. Both	22	2	12	36
6.*a.*	Staff for temporary schemes				
	1. Service terminated	3	..	..	3
	2. Absorbed in other schemes	15	..	8	23
	3. Some time absorbed	4	..	3	7
6.*c.*	Suggestion to avoid loss of experience				
	1. Supernumerary posts	8	..	..	8
	2. Some more schemes be started	7	..	5	12
	3. Scientists pool	6	1	3	10
	4. More permanent posts be created	2	1	..	3
	5. Others	2	1	3	6

APPENDIX V (*contd.*)

PART II

Head of Divisions

Sl. No.	Question	No of answers	% of answers
1	2	3	4
1.	*Who made the Plan ?*		
	(*a*) I.C.A.R.	7	12.7
	(*b*) You	9	16.4
	(*c*) You & other colleagues	34	61.8
	(*d*) Director with scientist concerned	2	3.6
	(*e*) ICAR Committee from different centres	3	5.5
2.	*Management of Scientific programmes*		
	A. *Equipments*		
	(*a*) Common Pool mutual adjustment	107	68.6
	(*b*) Some are with individual, some with common pool mutual adjustment	38	24.3
	(*c*) Individual has his own	7	4.5
	(*d*) Common pool some other method	4	2.6
	B. *Coordination in the Pool Department.*		
	Yes	158	98.7
	No	2	1.3
	C. *Interdisciplinary Programmes*		
	Yes	139	88.5
	No	18	11.5
	D. *Distribution of research projects*		
	(1) You	2	1.2
	(*b*) You and other members	139	86.4
	(*c*) Individual	14	8.7
	(*d*) Project leader/Head of Section	2	1.2
	(*e*) Director, Project review Committee Research Council etc.	4	2.5

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1	2	3	4
	E. *Teaching allotment*		
	(*a*) Board of studies	8	17.0
	(*b*) So that work is distributed in mutual consultation	16	34.0
	(*c*) Prof. Head decide	7	14.9
	(*d*) Among Prof. & Assistant Professor.	6	12.2
	(*e*) Any other method	10	21.3
3.	*Teaching specialisation*		
	Yes	95	100
	No	—	—
4.	*Work Load*		
	(*a*) No load	71	46·1
	(*b*) Light	16	10.4
	(*c*) Heavy	67	43.5
5.	*If Committee, who should appoint*		
	(*a*) Director	8	21.1
	(*b*) Head of Division	14	36.9
	(*c*) Research staff	7	18.4
	(*d*) Head & other staff	2	5.2
	(*e*) Director & Head	7	18.4
6.	*Composition*		
	(*a*) Head & other staff	5	12.2
	(*b*) Head & Class I Officers	7	17.1
	(*c*) Prof. & other staff	7	17.1
	(*d*) Senior members	6	14.6
	(*d*) Head of Department	1	2.4
	(*f*) Other staff	15	36.6
7.	*Tenure*		
	(*a*) Less than one year	1	2.7
	(*b*) One year	9	24.3
	(*c*) Two years	14	37.9
	(*d*) Three years	10	27.0
	(*e*) More than three years	3	8.1
8.	*Powers*		
	(*a*) Administration	8	19.0
	(*b*) Department policy	6	14.3
	(*c*) Budget policy	5	11.9

1	2	3	4
	(*d*) Development plan	6	14.3
	(*e*) Managing store	7	16.7
	(*f*) Training matter	4	9.5
	(*g*) Daily casual lab.	6	14.3
9.	*Rotation of Headship*		
	Yes	78	52.4
	No	71	47.6
	If Yes		
	(*a*) Among Professors	35	44.9
	(*b*) Prof. & Associate Prof.	8	10.3
	(*c*) Class I Staff	21	26.9
	(*d*) Class I & Class II	5	6.4
	(*e*) Among persons of equal rank	9	11.5
10.	*Research guidance*		
	(*a*) You guide all	19	12.1
	(*b*) Individual & independent	97	61.8
	(*c*) Jointly	22	14.0
	(*d*) Only Senior or independent Junior are guided by senior	19	12.1
11.	*Migration of scientists*		
	(*a*) Yes	50	66.7
	(*b*) No	25	33.3
12.	*Removal of bad scientists*		
	(*a*) Evaluation of work	45	34.9
	(*b*) Removal	26	20.1
	(*c*) Transfer to other work	31	24.0
	(*d*) Stoppage of increment	23	17.8
	(*e*) Warning/Demotion	4	3.1

APPENDIX V (*contd.*)

PART III

	IARI	IVRI	NDRI	Other Institutes	Total	%
5. *Heading by Rotation:*						
(*a*) Yes	349	83	58	315	805	62.08
No	128	22	20	307	477	37.2
(*b*) *Rotation*						
(1) Professors only	47	6	14	38	105	13.6
(2) Professors & Class I	216	99	39	219	573	74.4
(3) Others	56	—	4	32	92	12.0
(*c*) *Tenure*						
(1) Year	25	10	16	40	91	12.4
(2) Years	153	37	18	106	314	42.9
(3) Years and above	149	29	21	128	327	44.7
6. (*a*) *Administration of the Department by:*						
(1) Head of Department	51	22	9	142	224	17.1
(2) Department Committee	417	96	68	508	1089	82.9
(*b*) *No. of members*						
(1) Less than 5	17	6	10	41	74	6.8
(2) 5	145	22	13	119	299	27.7
(3) Proportionate to the number of staff in the Division	255	68	42	343	708	65.5
(*c*) *Composition*						
(1) Professors only	3	1	4	19	27	2.5
(2) Professors & Class	..	88	1	231	320	30.31
(3) Professors & Class I & II	406	6	62	2237	711	67.2
(*d*) *Rotation on Seniority*						
Yes.	335	76	51	335	797	72.1
No. (1) One each from various disciplines	91	20	11	139	261	23.6
(2) Others	4	..	4	40	48	4.3
(*e*) *Tenure of Committee*						
(1) Upto 1 year	21	11	10	37	79	7.4
(2) 2 years	342	73	49	353	817	76.8
(3) More than 2 years	59	11	7	91	168	15.8

	IARI	IVRI	NDRI	Other Instiutes	Total	%
(*f*) *Committee function* :						
(1) Development Plan for staff, space, equipment etc.	387	95	58	457	997	71.7
(2) Proposal and allocation of funds under annual budget	370	81	57	438	946	67.9
(3) Purchase of material and equipment	336	83	50	424	893	64.1
(4) Recommendation for advertisement of various posts	351	91	49	412	903	64.8
(5) Recommendations for promotions of staff	345	87	57	429	918	65.9
(6) Allocations of Research Scholars and teaching work	349	91	53	410	903	64.8
(7) Looking to convenience staff of regarding working conditions	72	4	7	46	129	9.2
(8) Formulation, allocations & evaluation of research work/projects	52	14	3	57	126	9.0
(9) Sponsoring candidates for training inside/outside the country	21	14	3	13	51	3.6
(10) Selection of experts on selection committee	3	2	..	2	7	0.5
(11) Formulation of recruitment policy	16	..	10	25	51	3.6
(12) Others	..	..	—	—	—	—
7. (*a*) *Promotions to next higher post irrespective of vacancy*						
Yes	459	110	76	654	1299	96.7
No	7	9	3	26	45	3.3
(*b*) Seniority	189	51	29	206	475	36.3
(*c*) Merit	79	15	10	136	240	18.4
(*d*) Both	198	46	34	314	592	45.3
Seniority						
(1) Less than 5	24	1	3	19	47	4.6
(2) 5 years	317	80	49	406	852	84.3
(3) 7 years	28	13	8	52	101	10.4
(4) 10 years	1	1	1	2	6	0.7

	AIRI	IVRI	NDRI	Other Institutes	Total	%
Merit						
(1) Less than 5	31	2	3	40	76	10.8
(2) 5 years	186	48	38	323	597	84.9
(3) 7 years	10	4	2	12	28	4.0
(4) 10 years	1	2	..	1	4	0.3
(*e*) *Assessment of merit by Committee of experts*						
Yes	361	86	71	565	1083	96.8
No	7	..	7	24	38	3.2
If yes (1) Internal	16	4	9	38	67	6.3
(2) External	60	9	12	77	158	14.8
(3) Both	280	72	45	442	839	78.9
(*f*) *Running Scale*						
Yes	474	117	79	673	1343	98.4
No	8	2	1	11	22	1.6
8. (*a*) *Periodical Assessment*						
Yes	455	114	79	638	1286	95.9
No	17	6	1	30	54	4.1
(*b*) *If yes, composition of experts Committee*						
(1) External	59	15	12	81	167	12.6
(2) Internal	45	6	6	53	110	8.3
(3) Both	362	93	62	528	1045	79.1
(*c*) *On the basis of assessment would you favour*						
(1) Advance increment	438	109	69	628	1244	94.5
Yes	..	..	..	..	..	..
No	30	5	8	29	72	5.5
(2) Increment to continue						
Yes	464	113	78	652	1307	98.3
No	3	2	..	18	23	1.7
(3) Increment to be stopped if work is bad:						
Yes	366	94	52	468	980	75.4
No	90	21	25	183	319	24.6
(4) Dismissal from the post if the work is bad						
Yes	198	62	37	268	565	48.4
No	144	53	40	366	603	51.6
9. *Present mode of Selection*						
Satisfied: Yes	158	25	19	231	433	33.0
No	332	95	61	391	879	67.0

	IARI	IVRI	NDRI	Other Instts.	Total	%
Relevance of Selection Committee						
Composition						
(1) External experts from the discipline only.	59	31	14	105	209	26.2
(2) Internal Experts from the discipline only.	14	12	11	42	79	9.9
(3) Both	118	19	24	153	314	39.3
(4) U.P.S.C. Pattern	31	20	—	31	82	10.2
(5) Chairmanship						
Director	11	2	4	26	43	5.4
Head of the Division/	9	—	—	3	12	1.5
Department judge/UPSC Member/Outside	20	13	2	25	60	7.5
Size of Selection Committee						
(1) 3	6	2	—	20	28	19.8
(2) 3–5	24	12	6	43	85	60.4
(3) above 5	9	4	2	13	28	19.8
Selection of Experts						
(1) Standing panel	13	8	—	12	33	58.0
(2) Rotation of experts	3	1	—	5	9	15.8
(3) Experts from University/Regions/State Agriculture Department	3	2	1	9	15	26.2
Presence of Department Authorities						
Yes	74	38	11	165	288	73.5
No	40	5	14	45	104	26.5
9(*b*) Relevance & Quality of :						
(1) Research : Weightage to be given to both	84	43	25	189	341	48.5
(2) Training : No comments	86	—	—	276	362	41.5
(*c*) Mode of Advertisement						
(1) Wide publicity	33	32	5	105	175	62.5
(2) Fixed date	5	—	—	10	15	5.3
(3) U.P.S.C. Pattern	16	15	3	29	63	22.5
(4) Circulation among employees	7	3	—	17	27	9.7

	IARI	IVRI	NDRI	Other Instts.	Total	%
Scrutiny by						
(1) Experts	16	12	4	54	86	42.1
(2) Deptt. Committee	30	12	6	13	61	29.9
(3) Head of Division/Deptt.	5	3	2	9	19	9.3
(4) Others	7	1	—	30	38	18.7
(*d*) Interview necessary yes						
(1) For all posts	26	29	16	119	190	21.1
(2) Initial stage further promotion automatic	184	36	30	212	462	51.3
(3) Written Test on the line of I.A.S., etc.	6	3	6	23	38	4.2
(4) Yes for direct recruitment quota	22	12	—	61	95	10.6
(5) Interview at initial level and then at senior level	34	14	—	67	115	12.8
(*e*) Faculty participation in interview						
Yes (1) Faculty only	29	19	8	10	66	10.6
(2) Institute only	27	8	1	44	80	12.8
(3) Both	97	54	30	216	397	63.7
No	32	—	11	37	80	12.9
(*f*) How much benefit to be given to :						

	IARI				IVRI				NDRI				Other Instts.				Total			
	I	II	III	E	I	II	III	E	I	II	III	E	I	II	III	E	I	II	III	E
(1) Seniority	186	100	28	—	48	33	6	14	18	28	8	—	216	155	68	26	488	314	110	40
(2) Qualifications	152	135	21	—	36	38	7	—	39	12	1	—	211	199	55	—	438	344	85	—
(3) Performance	54	101	154	—	5	11	58	—	6	24	23	—	100	150	168	—	165	286	403	—

(*g*) Other suggestions for evaluation					
(1) Quality Research papers	65	17	8	66	156	44.9
(2) Proper evaluation of work	76	18	4	77	175	50.4
(3) Allotment works be assigned to each expert	3	—	—	1	4	1.1
(4) Participation in Seminars	2	—	—	10	12	3.6
10. *Appointments by tenure*						
Yes	187	50	32	193	492	34.9
No	303	70	42	446	861	65.1

	IARI	IVRI	NDRI	Other Instts.	Total	%
(*a*) At what level ?						
(1) Junior level	30	—	5	20	55	12.5
(2) Senior level only . . .	30	23	7	42	102	23.2
(3) Head of the Deptt. and above .	17	8	5	18	48	10.9
(4) All levels	97	16	21	101	235	53.4
(*b*) Who should decide whether the work is good or bad ?						
10.(*b*) (1) Seninor Officers of Deptt. . .	4	3	7	9	23	5.5
(2) Head of the Institute . . .	22	—	3	37	62	14.8
(3) Committee of experts . . .	122	46	27	137	332	79.7
11. *Difficulties in opportunities of work*						
(*a*) Teaching						
(1) Students not provided . . .	2	3	—	5	10	4.2
(2) Irrational/based distribution of students and subjects . . .	22	15	7	22	66	27.6
(3) Lack of Laboratory and Library facilities	8	2	24	10	44	18.4
(4) Others	99	1	3	16	119	49.8
(*b*) Independent Research Grant						
(1) Not available at all . . .	132	32	9	81	254	81.1
(2) Inadequate	19	7	11	22	59	18.9
(*c*) Freedom to carry out research						
(*a*) Difficulties :						
(1) Administrative procedure	28	5	1	37	71	13.4
(2) Inadequate research grant	29	2	2	19	52	9.8
(3) Lack of well equipped laboratories/libraries and research materials etc. .	67	15	8	59	149	28.2
(4) Selection of research problems by superiors only . . .	22	15	9	22	68	12.9
(5) Interference by the superiors in routine work	91	16	9	72	188	35.7

	IARI	IVRI	NDRI	Other Instts.	Total	%
(*b*) Remedial Measures :						
(1) Streamlinng of administrative procedure for procurement of materials & equipment . .	28	8	2	33	71	13.9
(2) Provision of adequate research grant	29	7	1	18	55	10.7
(3) Provision of well-equipped research laboratories and libraries	67	6	1	32	106	22.7
(4) Involvement of junior scientists in Selection of research projects	22	14	3	19	58	11.3
(5) Working freedom in carrying out research work to the junior staff	91	27	—	52	170	33.2
(6) Others	—	5	5	41	51	8.2
(*d*) Freedom to carry out and publish research work in one's own name						
Yes	146	37	31	265	479	58.1
No	148	48	18	131	345	41.9
(*e*) Co-authorship of the supervisors						
(1) Yes	428	102	76	523	1129	93.9
(2) Second author . . .	—	8	—	21	29	2.4
(3) Only mention in preface . .	—	—	—	—	—	—
(4) No	9	6	3	33	51	3.7
(*f*) Procedure followed for publishing research papers						
(1) Sent directly	61	8	5	51	125	12.4
(2) Sent after scrutiny	284	96	65	436	881	87.6
(*g*) Scrutiny of date in research paper by competent statisticians						
Yes	317	85	57	459	918	88.7
No	62	7	4	44	117	11.3

	IARI	IVRI	NDRI	Other Instts.	Total	%
12. *Difficulties in using equipments and materials of other Departments*						
Yes	211	44	40	121	416	39.9
No	143	51	19	415	628	60.1
13. *Research workers of one specialisation switching over to another discipline*						
Yes	251	82	23	250	606	95.6
No	6	—	—	22	28	4.4
14. *Methods for enforcing high standard of efficiency in*						
(*a*) Selection						
(1) Rigorous, unbiased & proper selection by competent authorities	99	37	29	190	355	32.6
(2) Provision of time/running pay scales	135	40	22	217	414	38.1
(3) Awards/Merit promotions for research work	52	22	8	150	232	21.3
(4) Formation of All India Agri./Scientific/ Research Service on the pattern of I.A.S.	9	3	3	26	41	3.8
(5) Others	8	6	3	29	46	4.2
(*b*) Promotions						
(1) Consideration of merit/seniority for promotion	25	1	7	101	134	21.5
(*c*) Retention						
(2) Increased quota for departmental promotion	18	1	—	46	65	10.4
(3) More freedom of research work	22	10	7	55	94	18.1
(4) Involvement of junior talents in creative research	2	2	1	11	16	2.5

	IARI	IVRI	NDRI	Other Instts.	Totol	%
(5) Improvement in working conditions including research facilities and amenities and training of scientists within and outside the country/provision of accommodation	48	40	17	147	252	40.6
(6) Others	—	7	6	47	60	9.9
15. *Methods of eliminating inefficient Scientists*						
(1) Issue of warning	34	11	12	63	126	15.7
(2) Transfer	32	7	5	62	106	13.8
(3) Demotion	7	5	5	13	30	3.9
(4) Stoppage of increments . . .	69	14	11	99	193	25.2
(5) Compulsory retirement . . .	41	23	1	69	134	17.5
(6) Periodical Evaluation of work . .	58	—	14	44	116	15.1
(7) Opportunity/Facility/guidance and training	11	—	10	46	67	8.8

APPENDIX VI

TERMS OF REFERENCE OF PANEL OF ADVISERS

Dr. V. H. Shah, in paragraphs 6 and 7 of his letter dated 5-5-72, addressed to Dr. M. S. Swaminathan, alleges that "a lot of unscientific data are collected and passed to you to fit to your line of thinking" and in support cites the following cases:

(*a*) In relay croping, a very large sized seed potato was used to show high yields;

(*b*) So much publicized Baisakhi Moong did not prove successful in National Demonstration; and

(*c*) So much praised work with slow release N. Fert. or Nitrifications inhibitors did not find experimental validity any where else in the country.

2. Besides, there have been statements from other sources to the effect that exaggerated claims have some times been put forward by the ICAR or institutes subordinate to it in regard to the results of research conducted by them. Some of the instances cited in the illustration of the alleged claims are as follows:

(1) A new strain of maize with the protein content doubled and having nutritious value like milk;

(2) Discovery of Sharbati Sonara wheat having protein content comparable to milk with regard to lysine content;

(3) New Seed of Bajra which can give yield of 32 maunds per acre; and

(4) A variety of sabarmati rice which was having a real flavour, was very good in cooking, and did not stick.

3. The ICAR has furnished the Committee with the material on (A), (B), (C) and (1), (2), (3) and (4) above.

4. The Committee desires that an expert assessment be made of the allegations in question and, accordingly, resolves to appoint the following Panel of Advisers:—

(*i*) Dr. V. N. Dandekar . . . . . *Chairman*

(*ii*) Dr. L. S. Negi

(*iii*) Dr. J. S. Patel

(*iv*) Dr. C. R. Rao

5. The terms of reference of the Panel are as follows: —

(*a*) to examine the allegations made by Dr. Shah in the light of the material supplied by the I.C.A.R. and of such other relevant evidence as the Panel may desire to obtain and to report its findings thereon (para 1);

(*b*) to consider and comment on the allegations mentioned in para 2; and

(*c*) to make suggestions on such other matters as Panel considers relevant to the subject referred to them and in particular on the measures they consider desirable for countering the possibility of "unscientific data being collected and passed on" to higher authorities.

6. The Panel is requested to give its report before November 15, 1972.

APPENDIX VII

VISIT OF THE COMMITTEE TO DIFFERENT INSTITUTES

Name of Institute	Date of visit	Members who visited
Indian Agricultural Research Institute, New Delhi.	29th August, 1972	Dr. P. B. Gajendragadkar Dr. D. S. Kothari Prof. Nagchoudhuri Prof. M. S. Kanungo
—do—	20th October, 1972	Dr. P. B. Gajendragadkar Prof. M. S. Kanungo
Central Rice Research Institute, Cuttack.	27th September, 1972	Prof. M. S. Kanungo
Central Inland Fisheries Research Institute, Calcutta.	29th September, 1972	Prof. M. S. Kanungo
Cotton Technological Research Laboratory, Bombay.	12th—18th October, 1972	Dr. P. B. Gajendragadkar Prof. B. D. Nagchoudhuri Shri B. Venkatappiah
Jute Agricultural Research Institute, Calcutta.	23rd & 24th Oct., 1972	Shri B. Venkatappiah
Jute Technological Research Laboratory, Calcutta.	25th & 26th Oct., 1972	Shri B. Venkatappiah
National Dairy Research Institute, Karnal.	6th November, 1972	Prof. B. D. Nagchoudhuri Prof. M. S. Kanungo

APPENDIX VIII

SOME CASES OF IRREGULARITIES

The Secretariat of the Committee examined 879 files of appointment made to the ICAR and its Institutes. Out of this number, about 31 were identified as *prima facie* revealing irregularities relatively of a serious character. The Secretariat then sent these cases to the DG ICAR inviting comments. After the comments were received and considered, the cases in question were screened again and finally 14 instances have been chosen, as illustrative of some of the grave irregularities involved. Even so, the Committee wishes to emphasise the fact that in preparation of this appendix, the Committee has been concerned only with the irregularities to which it has drawn attention and not with the merits of the candidates selected. The Committee is, therefore, anxious that anything contained in this appendix should not be taken to cast any asperation on the merits of the selections made, or reflections on the candidates concerned.

I. Appointment to the post of Dean and Joint Director, IARI in the grade of Rs. 1600-2000.

This post was initially advertised in 1966 and the first selection committee met on 1-10-66. Since they failed to find any suitable candidate from among those who had appeared before the selection committee, and since the advertisement an important fact relating to attachment of special pay of Rs. 150 to the post had been ignored, the committee suggested that further contacts be made and the post, if necessary, be re-advertised. The same selection committee met on 10-3-67 to interview three new candidates along with two candidates from the earlier list. The committee still did not consider any of the candidates suitable for the post and decided to invite five Heads of Divisions of the IARI for discussions with the committee with a view to considering whether anyone of them could be selected for the post. Three of these agreed to come, and they were interviewed on 20-3-67. The committee recommended one of these Heads of Divisions as suitable for the post.

We have been informed by the ICAR that before this recommendation could be accepted, a number of representations by individual scientists and Members of Parliament were made to the Minister of Agriculture against the manner in which this selection had been made and against the actual selection. It was as late as November 1967 that a final decision was taken to revise the grade of the post and re-advertise it.

The post was re-advertised in the revised scale (Rs. 1600-2000) in March, 1969 with the following qualifications:—

Essential

(*i*) Doctorate degree in any of the branches basic to Agriculture.

(*ii*) An outstanding research and teaching record with evidence of having created an active school of post-graduate research.

(*iii*) Experience of organisation of post-graduate courses and of administering an experimental station.

Desirable

(*i*) Interest in extra-curricular activities and in the application of science for economic development;

(*ii*) Knowledge of foreign languages.

1. In advertising this post while specifying the essential qualifications for the post, the requirement of teaching and research experience of 10 years was modified. This was contrary to the model qualifications prescribed by the ICAR *vide* their letter No. 2-1/67-Rectt. I dated 11-5-67 which were reaffirmed by the ICAR on 13-3-1970. The qualifications specified in the advertisement did not mention any specific number of years in this regard.

2. Before we part with this case we could like to refer to one aspect of the composition of the selection committee. It appears that a foreign expert was associated with this committee as its member. It is time that such association does not contravene any bye-law of the ICAR. Nevertheless, such association of foreign experts with the selection committees appointed by academic bodies either as members or chairman does not appear to be appropriate and should be avoided.

II. Appointment to the post of Project Coordinator, Animal Breeding and as Head of the Division of Animal Genetics. IVRI.

The selection committee for the post of Head of the Division of Animal Genetics, IVRI, which met on 19th February, 1970, while placing a scientist at No. 2 of the Panel, recommended that he may be offered the post of Project Coordinator of the All India Coordinated Project relating to Cross Breeding of Cattle at IVRI if this post is vacated by the scientist placed at No. 1 of the Panel by them. Since the number 1 scientist opted for the post of Head of the Division, the post of Project Coordinator vacated by him was offered to the scientist placed second on the Panel. Subsequently, in July 1971, the scientist who was placed at No. 1 of the Panel was selected by another selection committee for appointment as Assistant Director General in the ICAR. The Panel prepared by the earlier selection committee one and a half years back was revived, and the scientist placed at No. 2, who had earlier been appointed as Project Coordinator, was appointed to this post.

The following comments fall to be made in respect of these two appointments:—

1. The President ICAR had nominated a scientist to be the Chairman of the committee. However, the record shows that another scientist presided over the selection committee. No contemperaneous record has been kept to show why this has happened.

2. What is, however, more significant in this case is that the selection committee constituted for the post of Head of the Division of Animal Genetics went out of their way and without authority made a recommendation for appointment to another post for which it had not been constituted. What is still more surprising is that this unauthorised recommendation was accepted.

III. Appointment to the post of Deputy Director, Central Marine Fisheries Research Institute, Mandapam Camp (Rs. 1100-1400).

This post was advertised by the ICAR *vide* their advertisement No. 17/70 dated 21-11-1970. At the stage of scrutiny of applications received for the post, the Secretary ICAR observed that one of the candidates for the post had earlier been selected by a selection committee of the ICAR for a post in the same pay-scale (Head of Division of Fishery Biology) and he could be taken for this post without further interview. The Secretary, ICAR in his proposal discussed the merits of six other candidates for the

post. He pointed out that 3 of these were common and they had already competed with this scientist in the earlier interview and has been rejected in comparison to him. Among the remaining 3, 2 were very junior persons, and the merits of the last candidate who had applied from abroad were not discussed. The proposal was subsequently approved by the DG ICAR and the Minister of State for Agriculture. It is remarkable that the Secretary who was not a scientist should have taken upon himself to comment on the merits of prospective candidates in the manner in which he has done.

The following comments fall to be made on this appointment:—

1. According to the ICAR Bye-laws, each post had to be considered separately for purposes recruitment and there was no provision to utilise selection made for one post for purposes of filling up some other post. In similar circumstances many other requests for transfers have been turned down by the ICAR.

2. The same scientist was appointed as Deputy Director about six months after the selection of this scientist as Head of the Division, Fishery Biology. Meanwhile, the post of Deputy Director had already been advertised. Nevertheless, without following the prescribed procedure of appointing a selection committee, the scientist in question was appointed to the post of Deputy Director. The result was that the candidates who had applied for the post did not get chance to compete for the post, even though one of them had adequate research experience and also possessed a Ph.D. degree and should have been given the consideration.

IV. Appointment to the post of Assistant Director-General (Animal Science Education).

This post is being held in an officiating capacity by a scientist working in the ICAR since its creation on 1-1-70. Prior to this, the same scientist had been given *ad hoc* appointments in the senior grades of Rs. 1100-1400 and Rs. 1300-1600 with effect from April, 1966. This scientist applied for the post of A.D.G. (Animal Science Education) and A.D.G. (Animal Health), recruitment to which was held in August 1970. He was allowed to appear for interview for both the posts by relaxing the essential academic qualifications in his favour, for the post of A.D.G. (Animal Science Education) he was the only candidate recommended for appointment by the selection committee. The Minister for Agriculture recorded the following minute when this recommendation was put up to him for approval on 14-4-71:—

"I have seen the qualifications. This is not a case where relaxation would be justified. Most of the essential qualifications are lacking in....."

Subsequently, when another scientist, placed at No. 1 on the Panel for the post of ADG (Animal Health), failed to join the post, the proposal to appoint the same scientist was put up for the approval of Minister of Agriculture. He did not approve of this proposal in January 1972. Subsequently, the case was discussed by the DG ICAR with the Minister and a decision was taken that the post should be re-advertised specially indicating the revised essential qualifications, so that others having the same qu li-fications as possessed by this scientist could also apply.

The following comment is made on this case.—

"In this particular post since the commencement of the vacancy on 1-1-70 upto the issue of the revised advertisement and even thereafter upto the present stage, this scientist has been continued in the post on an *ad hoc* basis even though he fell below the minimum requirement of the post as originally advertised."

V. Ad hoc appointment to the post of Director—Central Coconut Research Station, Kasargod (Rs. 700-1250).

The post of Director, Central Coconut Research Station, Kasargod fell vacant in August 1967 consequent on the promotion of its incumbent. Initially, the senior-most officer of that Station, who happened to be in the grade of Rs. 250-900, was asked to carry on the current duties of the post of Director in addition to his own work. However, in November 1967 the Council issued orders appointing that officer as Director in a temporary capacity and this arrangement continued till January 1970. The same officer was then allowed to continue to hold another post of Joint Director in the same Institute in the scale of Rs. 700-1250 in an officiating capacity for a period of 1½ years.

The following comments fall to be made on this appointment:—

1. The officer who was given these *ad hoc* appointments was only a B.Sc. in Agriculture, and looking to the qualifications prescribed by the ICAR, he would have been qualified only for a non-gazetted post or at the most for a post in Class II in the scale of Rs. 400-950 in the quota reserved for departmental candidates.

2. Special consideration appears to have been shown to him in continuing him in the Senior Class I scale after jumping 2 intermediate scales, without facing any selection committee for a period of 4 years.

3. According to the Bye-laws of the ICAR, *ad hoc* appointment in this grade could be continued only for a period of one year.

VI. Appointment to the post of Project Coordinator (Respiratory Diseases of Poultry) in IVRI (Rs. 1300-1600).

The Selection Committee constituted for selection to the post of Head of the Division of Bacteriology & Virology at the IVRI recommended a Panel of two candidates. This post was offered to the first candidate on the panel. A month after the interview, a proposal was put up by the Director of Recruitment, ICAR who is a non-scientist administrative officer suggesting to another post of Project Coordinator (Respiratory Diseases of Poultry) in the IVRI. The grounds put forth for this recommendation were as follows :—

1. The candidate belonged to the Scheduled Caste and since he had been found suitable for a post at that level. It was incumbent on the Administration that a post in the equivalent grade be found for him.

2. The candidate fulfilled the qualifications prescribed for this post.

3. The qualifications prescribed for the two posts were similar. The Member-Secretary had informed the Director of Recruitment that the issue of offering an equivalent post to the candidate placed at No. 2 in the panel, was informally discussed by the selection committee and it had felt that he could be adjusted in an equivalent post.

4. Earlier, the same candidate had been interviewed for the post of Project Coordinator in 1968 and had been placed at No. 2 in the panel.

The proposal was put up for the approval of DG ICAR who also obtained the approval of Minister of State for Agriculture and Minister of Agriculture.

The following comments fall to be made on this appointment: —

1. According to the recruitment rules followed by the ICAR a separate selection committee had to be constituted for selection for each post. Thus, this appointment for a different post

on the basis of recommendations of a separate selection committee was not in accordance with the Bye-laws. This also deprived other eligible candidates for being considered for this post.

2. There is no reference in the proceedings of the selection committee about giving a suitable post in the same scale to this candidate.

3. To place any reliance in 1971 on a panel prepared in 1968 was not in order.

VII. Appointment to the post of Deputy Chief Artist in ICAR Headquarters (Rs. 700-1250).

The selection committee constituted for recommending candidates for the post of Chief Artist in the scale of Rs. 1100-1400 met on 30th May 1970. The committee recommended a panel of 3 candidates in order of preference. The first candidate was duly appointed to the post. After about six months, the office put up a proposal regarding revival of the existing post of Deputy Chief Artist in the scale of Rs. 700-1250, which was held in abeyance for some times, and also put up proposal for filling up the post. The Secretary ICAR in his note to DG stated that the panel prepared for the post of Chief Artist could be utilised for filling up this post. The candidate at No. 2 had in the meantime got some other offer, and hence he proposed that the candidate at No. 3 could be straight-away appointed to this post. This was approved by the DG ICAR.

The following comments fall to be made on this appointment.

1. It was contrary to the Bye-laws to utilise a panel constituted for a particular post for making appointment in a different job. It should have been filled up by separate advertisement.

2. There were other eligible candidates who were thus denied the opportunity to compete for the post.

VIII. Appointment to the post of Project Co-ordinator (Forage Crops) IGFRI Jhansi (Rs. 1300-1600).

The qualifications prescribed for the post were as follows:–

Essential.

a. Doctorate in Plant Breeding & Genetics or Agronomy or equivalent qualifications (relaxable to M.Sc. degree in case of candidates with an outstanding record of research in crop production).

b. 10 years' experience of research in crop production preferably on forage production as evidenced by published work.

c. Ability to plan, organize guide, co-ordinate and supervise research on crop improvement.

Desirable.

a. Experienee of research administration.

b. Knowledge of French/German/Russian.

c. Knowledge of modern methods of techniques applicable to forage production, conservation and grassland management.

Under orders of a senior scientist of the ICAR headquarters, interview letters were issued to 3 more candidates, who applied after the last date for receipt of applications was over and the initial screening had been completed with the approval of the DG ICAR. These orders in two cases were issued before

a fortnight of the date fixed for interview. One day before the interview, on scientist approached this senior scientist of the ICAR headquarters with a personal letter applying for the post. The Recruitment Branch pointed out that there was no time left for calling this candidate for interview at that stage. This candidate again met this senior scientist on the morning of the date fixed for the interview and the latter recommended to the DG ICAR that the candidate may be called for interview. The senior scientist himself to be a member of the selection committee. This proposal was approved by the DG ICAR.

The selection committee consisting of an outside expert as Chairman, 2 other outside experts and 3 officers of the ICAR including the said senior scientist interviewed all the candidates including this particular candidate and placed him at No.1 in a panel of 3 candidates.

The recommendations of the selection committee were considered in the ICAR and it was pointed out by the office that the calling of this candidate for interview was irregular. The office pointed out that the action of the senior scientist of the ICAR Hqrs. was not proper and the candidate had not produced his bio-data for examination by the committee. Finally, the office also pointed out that the candidate placed at N.2 of the panel was superior to the selected candidate in academic achievements, research experience, published work and research work on the particular aspect which was to be covered by the Project. The office also recommended that the recommendations of the selection committee may be set aside and the candidate at No.2 may be offered the post.

The DG ICAR supported these recommendations and in addition stated that the candidate recommended by the selection committee, did not fulfil one of the desired qualifications regarding knowledge of modern methods of techniques applicable to forage production etc. The Minister of State for Agriculture, to whom these recommendations were put remarked as follows:-

> "I am glad that DG has looked into this case. But I am really shocked and suprised with the decision of the selection committee. This will cause serious damage to the prestige of our scientific organisations. Recently, I am getting numerous complaints the way selections and appointments are made in IARI. I think it is high time we review the position in consultation with Director, Dr. Swaminathan. I entirely agree with the approach of DG. Dr. B.D. Patil may be appointed."

Subsequently the file was called for by the Minister of Agriculture and he recorded the following minute on the file:-

> "I have seen the file and have felt distressed. In view of the decision having already been communicated, there is nothing much that can be done though it might have been preferable to re-advertise. There have been a few cases where I have felt that the selection committee has not been quite objective and this was perhaps one of them. What, however worries me is the fact of evasion of responsibility by senior members in the ICAR. Even though Dr. R.B. Singh had clearly mentioned that he had been contacted on behalf of Deputy D.G. it was neither denied nor admitted though, of course at a much later stage an attempt has been made to question the truth of it, Then the Addl. Secretary, who was party in the selection committee gave a different note.
>
> 2 I felt therefore, that in future those members of the selection committee who were party to this selection should not be called to interview candidates. The number of experts from ICAR should be cut down and the selection of outside experts should be on the basis of their objectivity and outstanding merit as scientists.

3. I have no objection to the suggestion of Director-General at 'A' of the notes below and the approval of Secretary thereto."

The following comments fall to be made on this selection:

1. It was wrong to invite candidates for interview after the last date was over. There was particularly no justification for including candidates after the date for interview had been fixed and interview letters had been issued.

2. The role played by the senior scientist at the headquarters of the ICAR particularly is open to objection. He was himself a member of the selection committee and for him to entertain a candidate's application against all rules and regulations on the date fixed for interview, was highly improper. The sanctity of the entire recruitment process was thus violated by a senior scientist of the ICAR himself. The least that he ought to have done was to absent himself from the proceedings of the selection committee.

IX. Appointment to the post of Editor (Magazine) in the scale of Rs. 700-1250

The selection committee consisting of an outside expert as Chairman and four officers of the ICAR recommended two candidates for appointment in order of preference. The first candidate was offered the post for which the advertisement had been issued immediately thereafter. Meanwhile, another post of Editor was created in the ICAR and the the second candidate on the panel was appointed to this post in March 1967.

We have the following comments to offer on the appointment given to the second candidate on the panel:–

1. Papers relating to the constitution of the selection committee are stated to be not available. The selection committee was not constituted in accordance with the Bye-laws since as compared to one outside expert there were 4 ICAR representatives in the committee.

2. The candidate appointed was over-age by three years on the date of interview. He was not eligible for relaxation in his favour since he was not an employee of the ICAR or Government. The selection committee did not recommend any relaxation of age in his favour which was given in his favour subsequently in an *ex-post facto* manner after four years.

X. Appointment of Executive-*cum*-Welfare Officer, ICAR (Rs. 350-900)

This post was created for the ICAR Headquarters in 1971 for doing miscellaneous protocol and office work. Along with the creation of the post, *ad hoc* appointment was also made with the approval of the President, ICAR on 20-9-1971.

The following comments fall to be made on this appointment:–

1. No educational qualifications were prescribed for the post, even though it was in the Gazetted cadre. This post was not included in the regular cadre, recruitment to which may be made by regular line of promotion where it is not necessary to prescribe qualifications. Since this was out of the cadre, specific educational qualifications looking to its gazetted status should have been prescribed.

2. According to the Bye-laws of the ICAR for this post, regular selection to this post should have been made according to the rules prevailing in the Government for similar posts. On the Government side, appointment to such posts if they are included in the cadre is made on the

basis of seniority-*cum*-fitness, but this practice was not followed in this case. If they are ex-cadre posts as was the case here, recruitment in the Government would have been made through the UPSC and the ICAR should have constituted an *ad hoc* selection committee like other selection committees. This course of action has also not been followed.

3. Interview letters were issued only a day prior to the interview.

XI. *Ad hoc* appointment to the post of Senior Soil Conservation Officer, Dehra Dun and to the post of Chief Scientist, (Soil Conservation and coordinator), Dehra Dun.

This post fell vacant in February, 1966 as a result of the transfer of its existing incumbent. According to the recruitment rules, this post was to be filled up 100% by promotion. However, *ad hoc* appointment was given in addition to his existing duties to a Soil Conservation Officer working at the Dehra Dun Centre, who was junior to 3 other Soil Conservation Officers in the seniority list of this cadre who at the relevant time were provided at different centres. This *ad hoc* appointment continued till 13-10-70, except for a short break of about 6 months in 1967. The ICAR did consider this officer's claims for regular promotion but these were consistently refused in view of his position in the seniority list. The officer was allowed extra remuneration also only for a period of 6 months at the rate of Rs.50 p.m. because of this fact. The recruitment rules providing for 100% promotion were followed till March, 1971 and in any regular recruitment at the post it would have gone to one of the three Soil Conservation Officers senior to him in the seniority list, provided he was found suitable.

The same officer appeared before a selection committee constituted for the post of Project Coordinator at Hyderabad under the All India Coordinated Project for Research for Improvement of Crop Production on 12-8-70. The selection committee, while placing him at No. 2 in the panel, recommended him for a post of equivalent status in the field of soil and water management. After some time a post of Chief Scientist, Soil Conservation and Coordinator in the scale of Rs. 1300–1600 with headquarters at Dehra Dun Centre was created. In October, 1970 a proposal was submitted to the D.G. recommending that this officer on the basis of the recommendations of the selection committee, may be appointed to this post. This proposal was approved by the D.G. ICAR and simultaneously the post of Senior Soil Conservation Officer, which was being held by him in an *ad hoc* capacity, was held in abeyance. This offices was made in charge of the Centre while holding the post of Chief Scientist.

The following comments fall to be made on these two appointments :

1. The continuous *ad hoc* appointment of a junior officer was open to objection on principle.
2. The Bye laws do not provide for utilisation of panel constituted by a selection committee for a particular post for appointment to a different post. The selection committee also had no power to recommend a candidate for any other post of equivalent status.

XII. Appointment of Biometrician (System Analysis) at IARI (Rs. 700—1250)

This post was advertised in July 1971 under the ICAR Advt. No. 13/71. The following qualifications were prescribed :—

Essential :

(*i*) Master's degree or equivalent Honours degree in Statistics or in Mathematics with Statistics as a special subject followed by the post-graduate training in agricultural/animal husbandry statistics from a recognised Institute.

(*ii*) Five years' experience of work in statistics as applied to agricultural/animal husbandry experimentations or surveys as evidenced by published work.

(*iii*) Teaching experience preferably at post-graduate level.

Desirable :

(*i*) Doctorate in agricultural statistics or Biometry.

(*ii*) Knowledge of French/German/Russian.

(*iii*) Knowledge of modern methods of investigation in design or sampling programming and information retrieval for computer use.

The following comments fall to be made on this appointment :—

The constitution of the selection committee was not according to Bye-laws since it contained only one outside expert. As a matter of fact, the majority in the committee rested with the official members who were two in number.

XIII. **Appointments to the posts of Administrative Officers/Assistant Administrative Officers.**

A circular bearing No. F. 1(6)/69-Rectt. II dated 13th October, 1969 was issued by the ICAR inviting applications from eligible candidates for drawing up a panel at the Central level for appointment to the post of A.Os/AAOs. The following categories of employees were made eligible for consideration :-

(*a*) Section Officers under the ICAR (Research side) and Section Officers of the cadre of the Department of Agriculture as a whole or AO/AAOs/Asstt. Registrar etc. in the Class II scale in the Institutes under the ICAR.

(*b*) must have put 8 years of service in a supervisory capacity with at least 3 years experience of handling Estt. administrative work.

In January, 1971, another circular bearing No. F. 1(6)/60-Rectt. II dated 4th January, 1971 was issued for the same purpose. In this circular the following categories of officers were made eligible for consideration :—

(*a*) Section Officers in the ICAR working both on the Government & Research side.

(*b*) Asstt. Administrative Officers in the Institutes under the Council.

(*c*) Superintendents in the Institutes under the Council.

(*d*) Assistants at the Council's headquarters working both on the Government & Research side and Assistants in the Institutes under the Council who have put in at least 8 years of service in the Assistants or higher grade, of which at least 3 years should be in the Administrative Section.

A further circular was issued in July, 1971 bearing Nc. F. 1(7)/71-Rectt. II dated 14-7-71 for the same purpose and this circular, in addition to the categories of employees mentioned above, included the further following stipulation :—

"The eligible officers must have put in ten years of service in a supervisory capacity with at least three years' experience in handling establishment, recruitment and other service matters. For computing the ten years of service in a supervisory capacity, the service rendered by the person concerned from the date he started getting a pay of Rs. 210 (basic) and above on a regular basis will be taken into account".

The applications received in response to the last two circulars were screened by the office and a Departmental Selection Committee met in November 1971 for selecting the candidates.

The following comments fall to be made on these selections:—

1. Though a period of six years has passed since the Research Institutes were taken over by the ICAR, suitable recruitment rules for these posts have not yet been framed.

2. In contravention of the provision of the Bye-laws, where the rules were to be made with the approval of the President, criteria have been changed at the Secretary's level without obtaining his approval.

3. 12 employees, who were short of about one year of the required experience as laid down in the criteria, were called for interview by the Director of Recruitment on the ground that they formed border line cases. Out of these 5 employees were finally selected. 2 employees, who fell short of the required experience by 2 years and whose names did not even figure in the screening statement compiled by the office for calling the candidates for interview, were called for interview and selected.

XIV. Appointment by transfer of Head of the Station, Regional Research Station, Kanpur.

The post of the Head of the Regional Research Station, Kanpur in the grade of Rs. 700–1250 fell vacant on 30th June, 1972. The senior-most officer of that Station has since been discharging the current duties of the post without any financial benefits. On the recommendation of the Director IARI made on 13-10-72, the ICAR issued orders on 3-11-72 changing the designation of the post and also transferring a scientist holding an equivalent post at the Regional Research Station Coimbatore.

The following comments fall to be made on this appointment:—

1. According to the Bye-laws of the ICAR, each post has to be filed up by separate direct recruitment. The practice being followed by the ICAR of filling up posts in a limited manner by transfers between the Sub-stations/Regional Stations/Headquarters has no corresponding provision in the Bye-laws.

APPENDIX IX

REPORT OF THE PANEL OF ADVISERS

1. *Appointment of the Panel* :—The background to the appointment of the Panel and its Terms of Reference are contained in the following resolution of the ICAR Inquiry Committee dated 15th September, 1972 :—

"Dr. V. H. Shah, in paragraphs 6 and 7 of his letter dated 5-5-72, addressed to Dr. M. S. Swaminathan, alleges that 'a lot of unscientific data are collected and passed on to you to fit to your line of thinking' and in support cites the following cases :—

(A) In relay cropping, a very large sized seed potato was used to show high yields ;

(B) So much publicised Baisakhi Moong did not prove successful in National Demonstrations and

(C) So much praised work with slow release N. Fert. or Nitrification inhibitors did not find experimental validity anywhere else in the country.

2. Besides, there have been statements from other sources to the effect that exaggerated claims have some times been put forward by the ICAR or Institutes subordinate to it in regard to the results of research conducted by them. Some of the instances cited in illustration of the alleged claims are as follows :—

(1) A new strain of maize with its protein content doubled and having nutritious value like milk;

(2) Discovery of Sharbati Sonora wheat having protein content comparable to milk with regard to lysine content;

(3) New seed of Bajra which can give yield of 32 maunds per acre ; and

(4) A variety of Sabarmati rice which was having a real flavour, was very good in cooking, and did not stick.

3. The ICAR has furnished the Committee with material on (A), (B), (C) and (1), (2), (3) and (4) above.

4. The Committee desires that an expert assessment be made of the allegations in question and, accordingly, resolves to appoint the following Panel of Advisers :—

(*i*) Dr. V. M. Dandekar .. *Chairman*

(*ii*) Dr. L. S. Negi

(*iii*) Dr. J. S. Patel

(*iv*) Dr. C. R. Rao

5. The terms of reference of the Panel are as follows :—

(*a*) to examine the allegations made by Dr. Shah in the light of the material supplied by the ICAR and of such other relevant evidence as the Panel may desire to obtain and to report its findings thereon (para 1) ;

(*b*) to consider and comment on the allegations mentioned in para 2; and

(*c*) to make suggestions on such other matters as the Panel considers relevant to the subject referred to them and in particular on the measures they consider desirable for countering the possibility of "unscientific data being collected and passed on" to higher authorities.

6. The Panel is requested to give its report before November 15, 1972."

In the following we submit our report item-by-item on the several items referred to us.

2. Dr. Shah's allegations : "*In relay-cropping, a very large-sized seed potato was used to show high yields.*"

(*i*) Results of experiments on relay-cropping are reported in the IARI publication : "Recent Research on Multiple Cropping" published in 1972. It seems that experiments on four-crops-a-year sequence consisting of Moong, Maize, Potato and Wheat were conducted for four years from 1967-68 to 1970-71. For potato, four short duration varieties, namely, Kufri Chamatkar, Kufri Alankar, Kufri Sundari and Chandramukhi were used. The yields of potato (quintals /hectare) were as follows: 206.0 in 1967-68; 213.0 in 1968-69; 220.0 in 1969-70; and 250.0 in 1970-71. The average for the four years works out to 222.2 quintals per hectare. The publication does not give data on the cize or the quantity of seed potato used in these experiments.

(*ii*) We were able to obtain from the Director, IARI the Field Note Books on these experiments. We regret to say that the field records in these books were extremely unsystematic and that the books are more in the nature of scribbling-pads. The physical condition in which they are preserved is also not good. The yields recorded in these books broadly tally with those published in the above mentioned publications; but the difference though negligible, is nowhere explained. Regarding the size and quantity of seed used, we could locate only one entry in the Note Book for the year 1969-70. It indicates that 15 quintals/hectare seed of Kufri Alankar was planted. The experiments were conducted presumably on 1/46 hectare plots. The note book does not record the actual quantity of seed used in the specific experiments. We consider this quite unsatisfactory manner of recording of experimental data.

(*iii*) We understand that the seed rate for potato varies between 8—20 quintals/hectare depending upon the size of the seed and the seed rate. A seed rate of 15 quintals/hectare does not therefore appear to be excessive.

(*iv*) The Field Note Books do not note the size of the seed used. The Director, IARI has informed us that no special selection was made in respect of seed size and that the seeds were supplied by the CPRI, station Babugarh or by Dr. P. N. Aurora, Vegetable Agronomist, IARI and ranged from 30 gms. to 45 gms. A note from the Division of Agronomy of IARI given to us mentions that the optimum size of seed is 30 gms. (3/4 "to 1¼"). It also notes that the potato

varieties Chamatkar, Alankar and Chandramukhi normally produce tubers each weighing more than 50 gms. and that therefore seed of smaller size is not easily available in adequate quantity.

(*v*) A letter from the Government of Orissa states that the farmers prefer seed of whole tubers of 1 cm. diameter which weighs about 10 gms. It also mentions that for the variety Sundari, whole tubers of 2 cms. diameter are normally planted. A letter from the Secretary, Department of Agriculture, Maharashtra, states that tubers of size 2.5 to 2.0 cms. weighing about 30—40 gms. are normally used for planting and that tubers of bigger size are usually cut to the recommended size and the cut pieces planted.

(*vi*) In view of this range in the size of seed used, we do not think that particularly large-sized seed was used in the IARI experiments. The fact that the particular varieties have large-sized tubers has also to be taken into account. The total quantum of seed used per hectare also does not appear to be excessive.

(*vii*) The yields obtained in the IARI experiments also do not appear to be exceptionally high. As noted above, the average yield over the four years in the IARI experiments was 222.2 quintals/hectare. Information received from the DG, ICAR shows that in 20 National Demonstrations of Chandramukhi in U.P., the average yield was 251.60 quintals/hectare and that in 7 demonstrations on Chamatkar, the average yield was 287.81 quintals/hectare. The Potato Development Officer, Punjab, in a letter to DG, ICAR, mentions that the variety Chandramukhi gives on an average 100 quintals per acre (about 250 quintals/hectare) and that many progressive farmers get yields of 150 quintals or more per acre.

(*viii*) The reported yields from Maharashtra and Mysore are considerably lower. Secretary, Department of Agriculture, Maharashtra, states that the yields of potato are 30-40 quintals per acre (about 75-100 quintals per acre) for the up-to-date variety and 40-50 (about 100-125 quintals per hectare) quintals per acre for the Chandramukhi variety. Secretary, Department of Agriculture, Mysore states that the average yield of Chandramukhi and Shakti are 60 quintals per acre (150 quintals per hectare).

(*ix*) Thus the yields obtained in the IARI experiments do not appear to be exceptionally high: they have been bettered in the National Demonstrations in Uttar Pradesh; and better yields have also been reportedly secured by the farmers in Punjab. The reported yields in Maharashtra and Mysore are considerably lower; but considering the soil-climatic difference, it is not fair to compare the yields in Maharashtra and Mysore with those indicated in IARI.

(*x*) To conclude: (a) It is possible that slightly large-sized potato seed was used in the IARI, experiments. However, it seems likely that this was not because of deliberate selection but because of the circumstance that the particular varieties produce normally rather large-sized tubers. (b) On the basis of information available to us, the quantum of seed per hectare, used in the IARI experiments does not appear to be excessive. (c) If, in fact, very large-sized seed was used in the IARI experiments, it is not reflected in exceptionally high yields; the yields obtained in the IARI experiments have been corroborated by the National Demonstrations in U.P. and experience of the farmers in Punjab. (d) It is essential to maintain a complete and detailed record of experimental work including its design, particulars of

materials and treatments used such as varieties, seed rates, spacing, fertiliser doses etc. in a systematic manner preferably in a separate project file for each experimental series. Such records should be duly signed by the Scientist in charge of the project.

(*xi*) Therefore, on the strength of the evidence before us, we do not think that Dr. Shah's allegation that "in relay-cropping, a very large-sized potato seed was used to show yields" can be sustained.

3. Dr. Shah's allegation: "*So much publicised Baisakhi Moong did not prove successful in National Demonstration*".

(i) The results of the relay-cropping experiments in which Baisakhi Moong was one of the crops are published in the IARI publication: "Recent Research on Multiple Cropping" published in 1972. In a series of experiments conducted over four years from 1967-68 to 1970-71, the average yield of Baisakhi Moong is shown to be 10.1 quintals/hectare in moong-maize-wheat rotation; 11.0 quintals/hectare in moong-maize-potato-wheat rotation; and 10.1 quintals/hectare in moong-maize-torai-wheat rotation.

(ii) Even higher yields of Baisakhi Moong are reported in experiments conducted at Pantnagar. They are published in the April 1970 issue of the Indian Farmers' Digest. The reported yields are as high as 12.0 quintals/hectare.

(iii) Information received from the DG, ICAR, on the National Demonstrations on Moong conducted between 1960 and 1971, give the following results:—

State	Number of demonstrations	Yield quintals/hectare
Maharashtra	9	9.10
Andhra Pradesh	10	8.86
Rajasthan	16	7.02
Madhya Pradesh	29	6.80
Punjab	13	5.90
Delhi	49	5.22

Thus it seems that it is only in Maharashtra and Andhra Pradesh that the National Demonstrations show yields of Baisakhi Moong which are comparable with those obtained in the experiments in IARI. The yields are much lower in Rajasthan and Madhya Pradesh. In Punjab and Delhi, the yields are only about half of those obtained in the IARI experiments.

(iv) The Director of Research of the Agricultural University, Hissar has stated that the Baisakhi Moong gave a yield of 7.5 quintals/hectare. It is reported that the Baisakhi Moong did not prove successful in Himachal Pradesh. The results of Baisakhi Moong in Assam also have not been satisfactory. In Orissa, the yield of Summer Moong is reported to be between 6 and 7 quintals/hectare provided it is not affected by yellow mosaic which is common in the summer crop.

(v) Thus it seems that the results of Baisakhi Moong in experiments conducted in IARI and Pantnagar did not prove in the National Demonstrations, except in Maharashtra and Andhra Pradesh, and also in the farmers' fields.

(vi) Hence, there appears to be some substance in Dr. Shah's allegations that the Baisakhi Moong did not prove successful in National Demonstration. It must be a common experience that some experimental results do not prove in the field; that indeed is the reason for conducting National Demonstrations. Under the circumstance it seems that further experimental and demonstration work was necessary before the varieties were released. However we note that Baisakhi Moong was recommended as a short duration summer crop on fields which might otherwise have remained fallow.

4. Dr. Shah's allegation: "*So much praised work with slow release N. Fert. or Nitrification inhibitors did not find experimental validity anywhere else in the country*".

(i) From a note furnished to us by the Division of Agronomy, IARI, it seems that Japan has been producing fertilisers blended with nitrification inhibitors. Work on this subject was done at IARI, between 1965 and 1970 mostly by students.

(ii) Material extracted from a student's thesis shows generally positive results. Two articles were published in the February 1972 issue of the Indian Farmers' Digest based on this material.

(iii) The inhibitors were tried at a number of places in the All India Co-ordinated Agronomic Experiments. At Kalyani, N-Fertiliser was found superior to urea with about 40 per cent higher grain yield. At Kharagpur, Sulphur-coated urea gave 20 per cent more yield. At Indore, sulphur-coated urea as well as neem karanj and mahua cake coated urea were found to be superior to untreated urea.

(iv) The Khadi and Gram Udyog Commission conducted a number of trials with neem seed cake on the Taluka seed Farms in Maharashtra. Though the variation is large, the overall results are positive.

(v) Dr. Shah's allegation that the work "did not find experimental validity anywhere else in the country" cannot therefore be sustained. Moreover, it seems that the work is still in its exploratory stages.

(vi) In Dr. Shah's allegation, the emphasis is probably on "so much praised work". We shall consider this aspect later.

5. Alleged exaggerated claims of ICAR, e.g. "*A new strain of maize with its protein content doubled and having nutritious value like milk.*"

(i) Dr. Joginder Singh, Project Co-ordinator (Maize), IARI, in his letter dated 9th October 1972, addressed to the Panel Chairman, states as follows: "As far as I am aware, in India, no research work in maize with regard to selecting for higher total protein content has been done during the past two decades. I am not aware as to who, when and where, would make such a statement which is self-contradictory. No one familiar with protein work in maize would have made such a statement... it is hard to visualise as to why would any one even attempt to compare maize varieties containing 'double protein' content against milk, the well accepted complete food... The statement apparently is self-contradictory, being either a misprint or made by some one not familiar with maize research work."

(ii) It seems therefore that the research work and achievement in maize have been misunderstood. Dr. Joginder Singh, in his above mentioned letter, has explained the position as follows :—

"Because of the high zein content in normal maize varieties, improvement in maize quality rather than total protein content has received more attention in recent years. The observations of Furdue scientists that the presence of single recessive gene opaque-2 favourably modifies the amino acid spectrum, attracted the attention of various maize breeders all over the world... A number of reports are now available in literature suggesting an increase in 100% or more of lysine and over 60% in tryptophan in opaque-2 varieties in contrast to their normal types.

"In India, like other countries, maize breeders have been interested in capitalizing on the new findings. The elite composites and the parental inbred lines were rapidly converted into opaque-2. On the recommandations of the Annual Workshop of All India Coordinated Maize Improvement Scheme, held at Udaipur in April 1970, Central Varietal Release Committee recommended the release of three opaque-2 composites, *viz.* Shakti, Rattan and Protina. While the first two named composites were developed at the IARI centre, Pantnagar centre developed Protina. Chemical analysis of these composites was also carried out recently through the courtesy of Dr. E.T. Mertz (Purdue University). He has pointed out that the opaque-2 maize composites developed in India contained even more lysine than opaque varieties available with him. (We have seen photostat of the letter from Dr. Mertz.)

"These opaque-2 maize varieties have also been tested for their biological efficiency using rats and chicken. Our results are comparable with those obtained elsewhere in the world. A preliminary study with a view to evaluating opaque-2 maize against milk as a supplementary food was carried out in Nangloi village in 1970. In this study, 70 children selected from the low, income group families, were given opaque-2 maize as a supplementary diet while another comparable group was provided with skim milk. Data on the gains in body weight suggested that children of 6—36 months fed on opaque-2 maize were comparable, if not better than skim milk. Further studies with a view to confirming these findings will be taken up shortly under another project which has been financed by the Nutrition Board of the Ministry of Agriculture."

(iii) We note that, in spite of his protestation, Dr. Joginder Singh himself has not refrained from comparing opaque-2 maize with skim milk.

(iv) Presumably, Dr. Joginder Singh is quoting from an article by Dr. M. S. Swaminathan titled "Accelerating Economic Growth via the Green Revolution" appearing in March 1971 issue of "World Science News", a private proprietory journal. In section 6 titled "Banishing Malnutrition" of that article, the following appears :—

"Research on the genetic upgrading of the quantity and quality of protein, in the major staples has led to the development of an yellow composite in maize which has about 12% protein and 4 gms. of lysine per 100 gms. protein. Encouraged by feeding tests in rats, where rats fed with the new maize grew fatter than those fed with milk, feeding experiments have been undertaken in children of the age group 6 to 36 months. 80 children in a Jhuggi Colony in the Nangloi village in Delhi State are being fed with high lysine maize every day since the 1st November, 1970 and another group of 80 children belonging to a comparable socio-economic stratus is being fed with skim milk as a comparison. The results are yet to be fully analysed but the available data indicate that the children fed with high lysine maize have gained more weight than those children who got their protein through skim milk."

The same is reiterated in the concluding section 9 titled "New Vistas in Agriculture with the following added : "What is more interesting is that the children fed on high lysine maize are less irritable according to their mothers than the milk-fed babies".

(v) We have not been able to examine the results of these experiments. After more than 18 months since Dr. Swaminathan's article when the results were not fully analysed, judging by Dr. Joginder Singh's communication no further results of these experiments have appeared. Under the circumstances, we are unable to decide whether the claims made have been substantiated by the results of the feeding experiments referred to.

(vi) In September 1972 issue of the Indian Farmers' Digest, Dr. V. Nagarajan of the National Institute of Nutrition, Hyderabad, has published data on the protein and lysine content of different varieties of maize. It is clear from these data that the opeque-2 variaties of maize, while they have about the same protein content (11.2 per cent) as many other varieties, have distinctly higher lysine content—4.10 per cent as compared to 2.25 per cent to 2.93 per cent in other varieties.

(vii) It is obvious therefore that there has been a certain confusion in public mind regarding the claims of the high-lysine maize because of a failure to see the difference between protein content and lysine content. In this, the scientists of the ICAR are not entirely free of blame. The subject also appears to be somewhat over-advertised.

6. Alleged exaggerated claim of ICAR *e.g. : "Discovery of Sharbati Sonora wheat having protein content comparable to milk with regard to lysine content"*.

(i) The following background information is extracted from a note on the subject furnished by ICAR :—

"As part of the programme of development of high yielding dwarf varieties of wheat, four varieties from Mexico, namely, Sonora-63, Sonora-64, Lerma Rojo-64A and Mayo-64 were introduced in 1963-64. Of these, two varieties, namely Lerma Rojo and Sonora-64 were found to be adapted to the Indian conditions but were red-grained and presented an acceptability problem. In view of this, IARI employed a mutation breeding programme in order to improve the grain characteristics of Sonora-64. The seed of Sonora-64 was irradiated and a number of amber seeded mutants were picked up. One of them which was exactly like Sonora-64 in all its characteristics except for grain colour was selected and named as Sharabati-Sonora. Sharabati Sonora was included in the All India Co-ordinated Wheat Trials in 1967-68 and released for cultivation in 1967."

(ii) Like other varieties of wheat developed in IARI, both Sharbati Sonora and the parental variety Sonora-64 were tested for protein and lysine in the Quality Testing Laboratory of IARI. Dr. J. S. Patel visited the Laboratory on 21-10-1972 and discussed with Dr. Austin and his associates, the procedure for taking samples and testing protein and lysine and recording the results. In his opinion, the techniques are well standardized and the accuracy is satisfactory. Dr. Patel also examined the laboratory

notebooks in the original. The following illustrate the nature of the results : On page 22, the SS (Sharbati Sonora) is noted to have protein content of 15.50% and S-64 (Sonora-64) as 12.19%. On p. 5, SS from Pantnagar is shown to have protein 15.28% while KS (Kalyan Sonora) as 12.80%. On p. 6, SS is noted to have protein 14.35% and KS 10.78%. On p. 57, SS is noted to have 13.98% and KS 11.75% protein. On p. 79 SS from Coimbatore is noted to have 19.20%, SS from R. Nagar 13.25% and SS from Willington 13.26% protein.

(iii) ICAR has furnished to us data in respect of SS and KS from five locations. It is clear from these data that in 1967-68, SS proved superior in protein content in samples from all locations except Gurdaspur. In 1969, the SS at Ludhiana and Pantnagar was assessed superior to KS both in protein and lysine.

(iv) Dr. (Mrs.) Vimal Mehdi in her thesis has reported results of protein content of SS and KS from 10 different places. On an average, SS has 12.14% and KS 11.30% protein. Variation from place to place is considerable; but the average difference between SS and KS is judged statistically significant.

(v) Prof. Oliver Melson of Purdue University has confirmed marked increase in protein and some increase in lysine in SS compared to Sonora-64.

(vi) In a report furnished by a Laboratory in Denmark the biological and Nutritional value of SS is confirmed to be superior to that of Sonora-64.

(vii) Dr. L. Noulard, a Belgium scientist has confirmed that SS has higher protein than the best variety in Belgium. In his experiments in 1970, he finds SS protein content to be 13.52% and in 1971 to be 15.55%.

(viii) Commercial samples of SS from all over India show the protein content to vary between 13.90 and 13.96.

(ix) Dr. Anand Kumar in his Ph.D. thesis has analysed 200 samples of SS in 1972. He finds the protein content in SS to vary from 12.2 to 20.9% with the mean at 16.08 ± 0.1131.

(x) In the Proceedings of the Nutrition Society of India (1969), SS is noted to have protein content of 16.2% and lysine content of 3.0% as against 13.0% and 2.26% in Sonora-64.

(xi) In Dr. Swaminathan's article in the Indian Journal of Agricultural Science, March 1969, more or less the figures appear as in the Proceedings of the Nutrition Society.

(xii) In the publication entitled "Grain Quality of Sharbati Sonora-64" published by the Indian Journal of Agriculture, Sharbati Sonora is noted to have protein content of 16.50% and Sonora-64 14.50%. In the ICAR bulletin on "Chapati-making Quality of Wheat", the protein content of SS is noted to 15.5% and that of Sonora-64 to be 14.2%.

(xiii) The following figures appear in the various publications mentioned :—

Authors	Reference	Wheat variety	Protein%	Lysine%
1. Verghees & M. S. Swaminathan.	Current Science, Sept. 20, 1966 pp. 469-70.	Sonora 63 normal	11.2	—
		Amber mutant 1	16.4	—
		Amber mutant 2	14.4	—
		Sonora 64 normal	12.4	—
		Amber mutant 1	15.0	—
		Amber mutant 2	14.5	—
		Lerma rojo normal	10.3	—
		Amber mutant 1	15.2	—
		Amber mutant 2	13.7	—
		Amber mutant 3	13.7	—
2. M. S. Swaminathan	Food Industries Journal, Nov. 1967 pp. 4-5	Lerma rojo normal	15.4	1.43
		Sonora 64 normal	14.0	1.86
		Sharbati Sonora (Amber mutant)	16.5	4.61
3. M. S. Swaminathan	Presidential address section of Agril. Sciences, 55th Indian Soil Congress, Varanasi, 1968.	Sonora 64	about 14	about 2
		Sharbati Sonora	16.5	3–4
4. —do—	Five Years of Research on Dwarf Wheats—'68 p. 38 (Table 16) p. 39 (Table 17)	Sonora 64	13.00	2.26
		Sharbati Sonora	16.20	3.00
		Sonora 64	14.5	—
		Sharbati Sonora	16.5	—
5. International Maize & Wheat Improvement Centre, Mexico	CIMMYT NEWS July-Aug. 1969	Sonora 64 normal	14.59	2.83
		Amber mutation	14.25	2.89
		Sonora 63 normal	14.65	2.73
		Amber mutation	14.65	2.87
		Lerma normal	14.59	2.65
		Amber mutation	15.62	2.70

Authors	Reference	Wheat variety	Protein %	Lysine %
6. M. S. Swaminathan, A. Austin, A. K. Kaul & M. S. Naik.	Cenetic and agronomic enrichment of the quantity and quality cereals and pulses. Intern. Atomic Energy Agency, Vienma, 1969.	Sonora 64	13.0	2.26
		Sharbati Sonora	16.2	2.96
7. M. S. Swaminathan	Plant Foods and Intellectual Dwarfism in "Plan Foods and Human Nutrition" Vol. 2, pp. 89—92, '71 (Received A April, 1970)	Sonora 64	14.0	1.86
		Sharbati Sonora	16.5	4.61
8. Magsaysay Award Citation	Times of India Aug. 7, 1971	Sharbati Sonora	16.5	3
9. M. S. Swaminathan	Recent Research on the Improvement of protein and Nutritive properties of Food & Feed Plants. IARI RES. BULLETIN (New Series), No. 6, Dec. 1971			
	Table 8 page 30	Sonora 64	10.88—	18.50
		Sharbati Sonora	11.80—	18.86
	Table 11 p. 34—36	NP 837	—	3.13 (highest)
		UP 301	—	2.26 (lowest)
	Table 11 p. 36	Sonora 64	12.25	2.21—2.83
		Sharbati Sonora	16.19	2.57—2.75
	Table 12, p. 37	Improved wheat varieties		

Dr. M. S. Swaminathan said at symposium "Science and India's Food Problem" held in New Delhi in October, 1967 that the protein content of wheat has thus been made nearly comparable to the protein of milk with regard to lysine content. The value of lysine of milk is Food Industries Journal (Nov. 1967 p. 4-5) is shown to be 7–8% whereas that of wheat in the same journal (December 1967 p. 6) is shown to be 5%. The allegation under reference is presumably based on this statement of Dr. M. S. Swaminathan. We note that the widest difference in the lysine content of Sonora-64 and Sharbati Sonora is that given by Dr. M. S. Swaminathan in his article in Food Industries Journal (1967)—It is 1.86% for Sonora 64 and 4.61% for Sharbati Sonora. From figures appearing in CIMMYT NEWS (1969) there is little or no differences between the two : 2.83% for Sonora 64 and from 2.70% to 2.89% for Amber Mutation (Sharbati Sonora)—Dr. M. S. Swaminathan himself indicates a small differences—2.86% for Sonora 64 and 2.98 for Sharbati Sonora—in his paper presented to International Atomic Energy Agency (1969). Nevertheless in 1970, writing in "Plant Foods and Human Nutrition", Dr. Swaminathan reverts to the earlier figures—1.86% for Sonora 66 and 4.61% for Sharbati Sonora. In August 1971 in Magsaysay Award Citation, Sharbati Sonora is said to have lysine content of 3.0%. In December of the same year (1971) writing in IARE Res. Bulletin, Dr. Swaminathan gives the following ranges for lysine content :—

Sonora—64..... 2.81 to 2.83%

Sharbati Sonora.....2.57 to 3.75% — indicating that there is little or no difference between the two. It seems that Dr. M. S. Swaminathan has not been sufficiently careful in his reference to the lysine content of Sharbati Sonora.

(*xiv*) At our request, samples of Sharbati Sonora were analysed in the Laboratories of the National Institute of Nutrition, Hyderabad, the Central Food Technological Research Institute, Mysore and the Department of Bio-chemistry, Indian Institute of Science, Bangalore. Their results are as follows :

LYSINE

	g/100 g of protein	g/100 g of wheat (undried)
Hyderabad sample I	2.47	0.372
II	2.51	0.378
III	2.45	0.369
Mysore	2.99*	0.45
Bangalore	3.17*	0.478

*The Mysore and Bangalore Institutes did not communicate the results on the basis of lysine g/100 g of protein. These are worked out on the basis of 15.07% of protein (undried wheat) as communicated by the Hyderabad Institute.

Thus, the results received from the Hyderabad Institute are in confirmity with several other results earlier quoted. The results are somewhat higher but no where near 4.61 per cent as mentioned by Dr. M. S. Swaminathan.

(*xv*) To conclude, it is obvious that the protein content of wheat as probably of other cereals, is highly variable depending upon the soil-climatic conditions and also the fertilisers used. The variation is well-reflected in the published results. However, in spite of the variation, Sharbati Sonora seems to be clearly superior to Sonora-64 and Kalyan Sona in respect of protein content but probably not in lysine content. Evidently, the lysine content of Sharabati Sonora could not be as high as that of milk.

7. Alleged exaggerated claim of ICAR, e.g. "New seed of Bajra which can give yield of 32 maunds per acre."

(*i*) Dr. K. S. Gill, Professor and Head of the Department of Plant Breeding, Punjab Agricultural University has furnished us certain data on the yield performance of Hybrid Bajra No. 1 (Hybrid 234 Bil—3B). The results are briefly as follows :—

(*ii*) In 1964, in experiments conducted at research stations at Ludhiana, Hissar and Sirsa, the average yield of Hybrid Bajra under unirrigated conditions was 2513 kg./hectare and showed an increase of 68 per cent over the yield of T-55 variety. In similar experiements conducted in 1965 at the research stations at Ludhiana, Ferozpore, Hissar, Abohar and Gurgaon, the average yield of Hybrid Bajra was 2555 kg./hectare and showed an increase of 63 per cent over the yield of T-55 variety.

(*iii*) In 1965, in experiments conducted at the research stations at Ludhiana, Ferozpore, Hissar, Abohar and Gurgaon, the average yield of Hybrid Bajra under irrigated conditions was 3323 kg. hectare and showed an increase of 39 per cent over the variety A 1/3.

(*iv*) In 8 National Demonstrations conducted during Kharif 1965 in the districts of Hissar, Rohtak, Gurgaon and Bhatinda, the recorded yields were 2430, 2905, 2940, 3186, 3848, 4360, 4709 and 5110 kg./ hectare. Presumably, these were under irrigated conditions.

(*v*) Results on cultivators' fields in 1965 in the districts of Ferozpore, Hissar, Rohtak, Sirsa and Mohindergarh are as follows : Average yield of Hybrid Bajra under irrigated conditions 1533 kg./hectare showing an increase of 58 per cent over the variety A 1/3; under unirrigated conditions the average yield of hybrid Bajra 1235 kg./hectare showing an increase of 25 per cent over the variety T-55.

(*vi*) In conclusion, we note that (a) all the results are from Punjab and rather old—1964-65; we would have appreciated results on varieties released by ICAR since then; (b) the results on cultivators' fields are much below those on the research stations and from the National Demonstrations; it would be worthwhile enquiring the causes thereof; (e) on the basis of available evidence, the Hybrid Bajra No. 1 is clearly a superior variety and the claim of 32 maunds per acre does not appear to be an exaggerated claim. However, we do not know whether the statement referred to us was made in relation to Hybrid Bajra No. 1 which was evolved some years ago.

8. Alleged exaggerated claims of ICAR, e.g. : *"A variety of Sabarmati rice which was having a real flavour, was very good in cooking, and did not stick".*

(*i*) Dr. S. Y. Padmanabhan, Director, Central Rice Research Institute, Cuttack, in his letter dated 20-10-72 states as follows : "The Central Rice Research Institute, Cuttack, undertakes the analysis of the quality aspects of all promising selections undergoing trials through the All-India Co-ordinated Rice Improvement Project; Accordingly BC-5-35, a selection which was later released under the name Sabarmati, was tested by this Institute during the course of the trials and prior to release also".

(*ii*) Based on his results, Dr. Padmanabhan asserts that the above-mentioned claims is correct. In support, he has furnished a copy of the proposal for the release of BC-5-55 to the All India Rice Improvement Workshop, in May 1970. The proposal gives information on the cooking quality, and flavour of BC-5-55 (Sabarmati) and BC-6-48. Judging by these data, Sabarmati is graded distinctly superior. The workshop recommended its release and in June 1970, the Central Variety Release Committee approved the release for Haryana, Delhi, Bihar (summer crop) and Rajasthan command area.

(*iii*) In 1970, a consumer acceptance study was undertaken. Samples of IR-8, Sabarmati and J muna from the fresh harvest of Kharif 1969 were sent to several testers. Dr. K. Ramiah, M.P., himself a rice specialist, and Shri J. S. Sarma, Economic and Statistical Adviser, Ministry of Food and Agriculture were among the testers. Both have certified favourably the cooking quality and aroma of Sabarmati.

(*iv*) In view of this evidence, we feel that the above mentioned claim is correct and not exaggerated.

9. We now turn to the last item of our terms of reference, namely how to counter the possibility of unscientific data being collected and passed on to higher authorities. A common concern at the back of all the allegations examined above seems to be that the results of scientific work should not be uncritically released and publicised. This is a legitimate concern. We have therefore enquired into the procedure which ICAR adopts for releasing for public use, any results of scientific research. We are informed that the results proved on the experimental farm, such as a new variety or a cultural practice, are tested all over the country for a period of three years in All India Co-ordinated Agronomic Experiments. The results of the Co-ordinated Experiments are discussed in Annual Workshops and relevant recommendations made. The significant results are then tested/demonstrated on farmers' fields under the National Demonstration programme. The final release of the results, for general use, is made either by the Central Variety Release Committee of the Ministry of Agriculture or by the Variety Release Committee of the Agricultural Universities/State Governments, after taking into account all relevant information. The procedure appears to be adequate. However, we are not sure that it is invariably followed. For instance, according to the information supplied to us by ICAR, it seems that Sharbati Sonora was released in 1967 before it was introduced in the All India Co-ordinated Agronomic Experiments in 1968 and in the National Demonstrations in 1969. Recognising the danger in hasty and uncritical release of new varieties, we emphasise that the procedure as laid down should be strictly adhered to. We also suggest that in the proforma in which information on the recommended variety is supplied to the variety Release Committee, negative points of the variety should be not only mentioned but emphasised.

10. Publicizing of the results, once they are released for the general use, belongs to the field of Agricultural Extension. In fact, we understand that much of the publication material is prepared in the Division of Agricultural Extension of IARI. A certain amount of over-simplification in the statement of claims of the new varieties or practices appears inevitable in such literature. Care is of course necessary to ensure that the extension literature does not contain unscientific exaggeration of the claims as happens in the commercial advertisement. It will also be advisable to continuously revise the extension recommendations after taking into account the experience of the extension Wing of the Ministry of Agriculture and the State Governments.

11. The phrase 'so much praised work' appearing in Dr. Shah's letter presumably refers to praise within the scientific circles. A complaint often made regarding the conditions of academic and scientific

work in India is that good work is not rewarded and bad work or lack of good work is not penalised. In view of the emerging trade unionism even among academic and scientific workers, the latter is not easy. Material rewards, such as quick promotions for good work are also not easy and perhaps not desirable. But a word of praise for good work where it belongs is certainly to be welcomed provided, of course, by selective praising of the work of his juniors, a senior worker does not try to create and promote a body of unscientific disciplines and devotees and in the process discourage or suppress critical scientific work.

12. The Panel has been subsequently requested to look into the qualifications of Dr. Rajat De in relation to his appointment as the Head of the Division of Agronomy of IARI. It is contented that having his M.Sc. and Ph.D. degrees in Plant Physiology, Dr. Rajat De is not an Agronomist at all and certainly not qualified to be the Head of the Agronomy Division. His case has been referred to us and we are asked to express an opinion on ; (a) whether a man who has taken pure science degree can become a competent agronomist in due course if he remains in the Agronomy Division for 8 to 10 years; and (b) whether in other universities and countries, pure plant physiologists, soil chemists and plant breeders are appointed to the highest positions in Agronomy Division. On (a), we are not able to present a unanimous opinion. Two of us who are Agricultural Scientists, feel that in view of the fact that a number of separate divisions have been consituted in the IARI, such an appointment should, not have been made. The other two of us do not favour, on general grounds, watertight compartmentalisation of scientific disciplines and hence do not think it impossible for a plant physiologist or a soil chemist or a plant breeder to become a competent agronomist if he worked in that field for 8-10 years. They feel that for the Head of a Division, a broader background and perspective is a distinct advantage over narrow specialisation. Whether Dr. Rajat De was the best available candidate was of course a matter to be decided by the Selection Committee. On (b), we are aware that such appointments are made in the foreign universities though, of course, in exceptional cases and with sufficient justification. As far as we are aware, such appointments are not made in the Agricultural Universities in India.

13. As more instances of allegations of unscientific attitudes, behaviour and practices in IARI, we cite the following. These come from the submissions made by three scientists of the Bio-chemistry Division of IARI. Dr. T. S. Raman challenges the findings in the Ph.D. thesis of Dr. L. S. Mehta, a Biochemist in the Nuclear Research Laboratory. Dr. Raman categorically asserts that certain data contained in Dr. Mehta's thesis "could not have been obtained by methods he has claimed to have been used." Dr. Y. P. Gupta who apparently has himself worked on the lysine content of different varieties of wheat, states that in the half-yearly report for period ending October 1968, he had reported the lysine content of Sonora-64 to be 3.26% but that the Head of the Division deliberately changed it to 2.26% so that the Sharabati Sonora might appear in a more favourable light. He seriously disputes the data on the protein and lysine content of Sharabati Sonora published by Dr. Swaminathan in the November 1967 issue of the journal "Food Industries". Dr. K. G. Sikka states that four varieties of Arhar (cajanus) have been recently released which he finds contain certain toxic substance causing blindness among rats. Within the short time available to us, it has not been possible for us to examine these allegations. We do not also think that it would be a fruitful course for us to pursue, It is obvious that these are very serious allegations. Whether they are substantiated a careful examination, the fact remains that there are many junior scientists in IARI who, rightly or wrongly, feel that they are not free to publish a scientific finding because it does not suit somebody higher up or that in fact unscientific data are being passed on to the higher authorities in return of favours and promotions. The existence of this feeling is most regretable because it creates the conditions for breeding of unscientific behaviour and practices if they do not already exist. Mere refutation of the allegations will not therefore do.

14. We are reluctant to recommend any specific measures to correct the situation in the present case because, unfortunately, the phenomenon is not confined to ICAR and its institutions. Barring minor exceptions, it pervades the entire scientific and academic community in the country. At the root of it is the greed for bureaucratic power and love of a comfortable life which afflicts this class. In this matter, there is no distinction between the juniors and the seniors; the juniors are intellectually as corrupt as are their seniors. Politicization of academic and scientific life has made the matter worse. We wish to emphasize this general situation because, without reference to it, we think it will be unjust to pass a judgement or suggest specific measures in the particular case before the ICAR Inquiry Committee.

15. We have pleasure in acknowledging the co-operation we received from all concerned scientists of the ICARI and particularly those of the IARI.

Sd/- V. M. Dandekar

Sd/- L. S. Negi

Sd/- J. S. Patel

Sd/- C. R. Rao

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