Shri Daji: He does not want a Commission to share his credit.

Shri Nambiar: The hon. Minister, with his youthful Deputy and the Commission will together form such a strong group which will give houses to our people during the third and fourth Five Year Plans. If our people get more houses, they will be happy and they will thank the Government. So, at least let us try to do that. Let the House agree to this humble request from the opposition to form a commission at least to tackle the problem.

With these words, I request that my resolution may be accepted.

Shri Daji: He will give the houses, but not the Commission.

Mr. Chairman There is an amendment.

Shri B. K. Das: I would like to withdraw my amendment, with the leave of the House.

Mr. Chairman: Does the hon. Member want his resolution to be put to withdraw his amendment?

Some Hon. Members: Yes.

The amendment was, by leave, withdrawn.

Mr. Chairman: Does the hon. Member want his resolution to be put to the vote of the House?

Shri Nambiar: Yes, for its acceptance. I request the House might grant this Commission—a small commission of four or five members.

Mr. Chairman: The question is:

"This House calls upon the Government to set up a Commission to enquire into the progress made in regard to the urban and rural housing and slum clearance schemes and to suggest measures for their speedy completion."

The motion was negatived.

16.04 hrs.

RESOLUTION RE: WORKING CONDITIONS OF RESEARCH SCHOLARS AND SCIENTIFIC WORKERS.

Shri Inder J. Malhotra (Jammu and Kashmir): Sir, I beg to move:

"This House calls upon the Government to appoint a Commission consisting of Members of Parliament, eminent scientists, and administrators, to investigate and enquire into the working conditions of the research scholars and scientific workers in various scientific institutes in the country."

I would like to say, at the very outset, that my main purpose in moving this resolution is to focuss the attention of the House and through it of the whole nation on the working conditions, emoluments and other difficulties being faced by the scientific workers in various research institutions in the country.

Sir I would also like to say that the hon. Minister, who is himself a renowned research scholar, during the debate, may please keep his mind absolutely open without any reservations and not say that he will not be prepared to accept such a Resolution.

The purpose of the resolution is not mainly to censure the Government or to put the blame on the Government, but that with the opinions which may be expressed by the hon. Members of this House, the Ministry and the Government may take certain steps to improve the existing working conditions of the scientific workers.

There is hardly any need to emphasise the role which science is playing and which science has got to play in the economic development of our country. The Central Government, in the Scientific Policy Resolution which was adopted in 1958, very clearly stated that the major aims of the policy are to foster, promote and

sustain ths cultivation of science and to encourage and initiate programmes gor the training of scientific and technical personnel.

According to this policy during the First and the Second Five Year Plans the Central Government took various steps for promotion of science, scientific research and of applied and fundamental research in the various fields of economic activity in the country The national laboratories in different fields of science were established. Then, the research programmes in various aspects of science are also beinug carried out, as they had been carried out in the past, by the various ministries of the Central Government, by various universities and institutions under the State Governments.

Now, even though there are a large number of research organisations, whether corporations or institutions or government departments, undertaking research practically covering all aspects of Scientific activity in the country, in my opinion, the results of the scientific research and scientific activity have not reached the common man. Even today, we hardly see small scientific gadgets being given to the common man for use in his home. After spending so much money on scientific research and after the establishment of a large number of research organisations in the country, if the desired results are not being achieved and the common man is not being benefited by the scientific research to the extent the comon man should have been benefited, I think it is a good reason to look into the matter and see, after all, what is wrong.? Either something is wrong with the basic policy of scientific research or in the co-ordination of scientific research or with the human element which is working in these research institutions. The establishment of a national laboratory with a beautiful building and up-to-date scientific equipments cannot bring the desired results which are expected out of that laboratory unless the human element in it, (by which I mean from the senior scientific officer down to the junior scientific research assistant, engaged in research activity), unless that human element is fully satisfied, has still got the required initiative in it to carry out the research and basically believes in the honesty of research. Without all these things, a laboratory with up-to-date scientific equipments cannot deliver the desired results.

I was a science student myself. I have studied for my post-graduate course in agriculture in one of the premier research institutes in the country, (namely, the Indian Agricultural Research Institute). I had the good fortune to work as a research assistant in a research institute under the Ministry of Food and Agriculture. I had been a little lucky to study in the United States of America also. From my personal observation of things and a little bit of experience, with whatever little I have got, I can say that the conditions of the research workers have changed in the country after independence, but not to the extent we want the working conditions in the research institutions to be chainged so that science can really deliver the goods which are very badly required for industrialisation and industrial development of the country.

Today in the research institutions the conditions are a little better, specially in the national laboratories and research organisations which function under the CSIR. But, apart from these research institutions and organisations in the research institutions and research departments working under the Ministries of the Central Government and State Governments, the conditions are absolutely the same which existed in 1947, There may be a little change and if a research assistant in a research institution in 1947 was drawing Rs. 160 per month, maybe today he is drawing Rs. 200 or 220 per month, but there is no sub-

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stantial improvement, so far as his emoluments are concerned.

It is very unfortunate that when the country has entered the scientific and has just come out of the cow-dung age to enter the scientific age, even today our society, our nation, does not recognise or give that social status to the research workers and the scientists who are doing such valuable work in the various research organisations and research institutions.

Today we claim that we are trying to build a social welfare State in India. I would just like to say one thing. If India is going to be a social Welfare State, then the bureaucratic administrators should not claim the top-most social status in the country. In a welfare State it is the workers, more especially the scientific workers, who should claim the top-most social status in the society.

Shri Narendra Singh Mahida (Anand): The Minister has it.

Shri Inder J. Malhotra: For that I do not blame the Government, but I say that that kind of apreciation for the scientists has to come into the minds of the Indian people.

Here I would like to quote from the report submitted by the Scientific Personnel Committee in 1959. This Report has been published by no less a person than Professor P. C. Mahalanobis in the *Science and Culture issue*. Talking about social appreciation of science, this Committee has very clearly stated—I am quoting from the Report—

> "The scientific revolution which has taken place during the last 25 or 30 years has given the scientist an indispensable and leading role in the economic and social developments of the future. Terms and conditions of employment, therefore, require to be considered in the new context. The scientist cannot replace political and social leaders or administrators but he must take the initiative in the advancement of knowledge and in the utilisation of this knowledge for the advancement of social and human welfare. It has, therefore, become necessary to attract to science as many men of ability as possible and to give them adequate facilities for their work. The only way to do this is to make the scientist feel that he has the appreciation of the society. It is necesary that a scientist should be given as attractive terms as men of comparable ability in administration and other occupations."

I would like to know from the hon. Minister, in view of the recomendations of this Committee which was made in 1959, what concrete steps were taken by the Central Government to see that a proper kind of appreciation atmosphere is created for the scientist and the scientific workers as far as society is concerned.

In the same report this Committee has also emphasised that as far as pay-scales, emoluments and other things are concerned a universal system has to be built up in India for the various types of research institutions and organisations under the ministries of the Central Government, State Governments and also the universities. In this very report it has also been emphasised that whatever steps have so far been taken by the Government are not sufficient to give that kind of incentive to our research workers really to do the job which they are capable of doing and to deliver the goods which are very badly required by the nation.

As an example I would just point out that in the Indian Agricultural Research Institute which is functioning under the Central Government's Ministry of Food and Agriculture about eleven grades are existing for the various types of research assist-

ants and scientific officers. The minimum basic pay starts from Rs. 110 and the maximum goes up to Rs. 1,800

In a research institute there are two types of scientific workers. One is the higher level of scientific officers whose main job and purpose is to plan and guide research activity in the institute. The second type of scientific workers in which the junior and senior scientific assistants, research assistants and junior scientific officers come, are the persons who really carry out the work in the research projects. A senior scientific officer plans a research project and hands over all other practical aspects and observations involved in the particular research project, from the practical point of view, to be carried out by the research assistant or the junior scientific assistant attached to that officer. If the whole job in a research project is to be done by these junior sicentific assistants, research assistants and junior scientific officers, I would plead that the major portion of the emoluments should also be given to these workers who are really carrying out the research work in a particular research project. In my opinion, a senior scientific officer in a research institute is not meant merely to plan a research project on paper and just to give guidance or orders on files most of the time, just as they move about in other departments of the Ministry, that a junior scientific officer or research assistant should go to the field or should go to the laboratory and take down this observation or that observation or do this or that. The real responsibility for a research project lies on the senior scientific officer to see that his project and research is being carried on honestly and in conformity with the observations that are being taken.

The Second Pay Commission did devote some time towards the pay scales and emoluments of the scientific staff mainly under the Ministries of the Central Government No doubt, the Second Pay Commission broadly emphasised this fact that generally the pay scales in the scientific institutions are low as compared to the persons with the same qualifications and same capabilities in other departments of the Government. By way of an example, I would give a very interesting thing which happened in the C.S.I.R. One day, two yungmen, both of them having M.Sc. degrees, came for employment to the C.S.I.R. One joined as a clerk and the other joined as a junior scientific assistant. After ten years, what happened? The young men who joined the C.S.I.R. as a clerk becomes an Under Secretary and the young man who joined the C.S.I.R., with the same qualifications, nearly on the same day the same organisation, to do research work, is still a junior scientific assistant in the same organisation. This kind of disparity, this kind of treatment to scientific workers cannot attract the really capable men.....

Shri Narendra Singh Mahida: Let him become a politician.

Shri Inder J. Malhotra:....the real genius, the real talent in the country to carry out scientific research on better lines and to bring out better results from scientific research. With this kind of conditions, there cannot be any improvement.

What happens? As I said previously, even today, in our country, bureaucratic administration is the No. 1 attraction for the capable and topmost young men from the Universities. When a young man graduates from a University, his first ambition is to become an I.A.S. officer. Why? Because, he feels that an I.A.S officer, compared to a scientific officer in the country, claims a higher social status, claims better appreciation from the Government and also from the people. It is high time that the Government should change its outlook for running the administration of this country. When a economically backward country as India,

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less industrially developed, enters the preliminary stage of industrial revolution, the bureaucratic administrators will have to take the back benches in the nation and also in the Government. I can point out hundred and one examples why we are not attracting real talent for our scientific institutions. Prof. Mahalonobis has, again, in the very same report to which I referred previously, in my opinion, brought out a wonderful phrase as far as science is concerned and as far as scientific activity which is being conducted in the country is concerned. He says that there is 'officialisation of science'. Officialisation and science are just two opposite things. This is what he says in his report. I am quoting him.

> "I venture to suggest that the basic factor has been progressive officialisation of science since Independence".

He was analysing the reasons why the research institutions were not giving us the results which they could, and he has mentioned this as one of the reasons, namely the officialisation of science. Then, he goes on to say that:

> "The high pay and great prestige and power of the administrative services dominates the thinking of both administrators and scientists.".

If by just a stroke of luck, a junior scientific officer, by appearing before the UPSC happens to get a senior job in a research institute, what happens? His room is changed, his office table is changed and so on. And what does he find? While as a junior scientific officer he was devoting more time towards his research projects, by becomming a senior scientific officer, he has to deal with a bundle of files on his table.

It is after observing all these things that Professor Mahalanobis has termed the cientific activity today in our country as officialisation of science. I say that if the complicated administrative rules of Government for running the research institutes cannot be thoroughly changed or revolutionised then let a very large army of IAS officers be deputed with these scientific workers and scientific officers to the scientific institutions to take care of the administrative troubles and difficulties which our scientific officers have to face today. When I say this, I also realise the danger therein. It is not only a potential danger, but I have seen the danger really existing in the premier agricultural research institute of this country, namely the Pusa Institute. There, in 1960, or to be more specific, in February, 1960, an unfortunate thing happened. Dr. Joseph committed suicide because of the low pay he was getting. Due to the complicated administrative rules of Government, every month, he was paid only a salary of Rs. 100.

At that time, when the matter was raised in this House, the hon. Minister of Food and Agriculture replied to the debate and said as follows. Dr. Joseph in the letter which he had written before his suicide had very clearly stated that due to the rules, and due to some sub-rules, his applications for better jobs were not forwarded by the Ministry; once when he happened to be selected for a better job, he was not relieved by the Ministry; and every time he made an attempt in the Ministry that he should be relieved, so that he may go and join the new and better job, some rule, and sometimes, a sub-rule was quoted, saying that according to this or that, he could not be relieved to go and join the new post.

An Hon. Member: What a shame it is!

Shri Inder J. Malhotra: At that time, the Minister of Food and Agriculture, while, replying to the debate, assured the House as follows. He said:

> "So far as liberalisation of the

rules and also the changing of the status of the scientists are concerned, that is a big question. .

"Without any doubt, that question, I think, today remains a big question. It is not only confined to the scientists who are under my Ministry. There are somewhere about 500 of them. But, there may be several thousand scientists. Apart from those, there are scientists in other countries who also are Indians. That is a big question which the Government is very seriously considering.

This assurance to the House was given by the Minister of Food and Agriculture. And, I take it that when any Minister of the Central Government gives an assurance, that assurance is given from the Government as a whole. I would like to know what steps, right from 1960 up till now, were taken either by the Minister of Scientific Research and Cultural Affairs or by the Ministry of Finance or by any other section of Government to see that these rules need to be liberalised, as the Minister himself confessed and assured us at that time. (*Interruption.*)

By way of an example, I would like to point out here one thing. It is said and so many times even our respected Prime Minister has also stated that our scientifically trained personnel who are working in foreign countries should come back to India and serve their own nation.

As I said previously, there are 101 examples to show, when with great ambition in their hearts and with valuable initiative those young men came to India, what fate they met with in this country. For six months or a year they had to move about from one department to another, from one Ministry to another. We say that we want our young men who are working abroad in the scientific field to come back to our country. I would only appeal to Government that first they should find a job and then try to find out a person who is working in a foreign country. Let his initiative be not made to die and let him not become a rolling stone going from one department to another. After a scientist becomes a rolling stone, after he experiences the frustration of unemployment, hardly would there be any initiative left in him or ambition in his heart to carry out research work.

I would give another example. A valuable piece of research in the field of cosmic rays was being carried out in a laboratory at Gulmarg through Dr. Gill, who was in charge of that laboratory. This gentleman has created a place of pride for himself as far as the United States of America is concerned. In the beginning, I believe—if I am wrong the hon. Minister may kindly correct me—this laboratory was run by the Aligarh University. There was some trouble between the Aligarh University and the running of that laboratory. The result is that Dr. Gill, without being allowed to devote his time to the valuable piece of research in the field of cosmic rays, this poor scientist is now being bothered with unnecessary correspondence, administrative difficulties and financial matters and things of that sort, which are a source of trobule between the laboratory and the Aligarh University.

This very scientist who is having difficulties in carrying out research work in India, has been requested by the 14 universities of the United States of America to visit that country only for three months and get $11,000 monthly as his fee. I concede that India is not in a position to give to the scientists the ame type of facilities or the same amount of emoluments as are paid in the United States. But Government and the nation can certainly give full appreciation to their work and full freedom to our scientists to carry out their work in the various scientific and research fields. After saying this I would say that the hon. Minister is certainly more qualified to have ob-

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servations in the field of scientific activity as compared to myself. I have put forward before the House some examples, the report submitted by the scientists' panel for personnel and the observations made by the Second Pay Commission and the general feeling existing in the various research institutions. It is time to look into this matter thoroughly, minutely so that a better system of administration and research is worked out in the various research institutions.

If the practical application of research carried on in the various research institutions is nil, it is no use wasting so much money in our various laboratories. One of the main defects in our country is that in various fields of science the practical applications of applied research carried on in various research institutions is absolutely nil. I will give an example. Agriculture is a science which is the basic concern of applied research. For fifteen years after Independence, applied research has been carried on in the field of agriculture in 101 research organisations in the country. Still, from the practical point of view, how has our farmer benefited by agricultural research? The results are absolutely nil.

There is another interesting example. A reasearch project was undertaken by the Central Government for colourisation of hydrogenated vegetable oil. The Central Government gave a good deal of money and our scientists a good deal of their time. It nearly reached the desired goal. But the practical application of that research is nil. Why? There may be some political considerations. After spending so much money and so many manhours of the scientists the Government reaches a decision that research is good and the scientists have done a good piece of work, but the practical application of that research work is not desired by the Government. If such a state of affairs were to exist, I would only say that right in the beginning they may decide whether the particular research project is desired to be undertaken in the country or not. Because, if a particular research project is not undertaken, then, the other research project which can be more beneficial for scientific activities and for the economic development of the nation may be undertaken.

In the end, I would only say this. In the various research institutions no doubt the scientific workers have been given the freedom to form their scientific associations. What happens in these scientific unions and associations? The main purpose of these associations and unions is that the scientific workers can put forward all kinds of their difficulties before the proper authority and expect a remedy for them. Again, this aspect also becomes a victim to the rules. A resolution is passed by scientific worker's union to the effect that such and such things are to be brought to the notice of the Ministry. That resolution has to go through the head of the department or the director. Now, there are few persons among the directors who, after they have become directors and heads of departments, keep that kind of interest in research which they had when they had not become directors and heads of departments. They have become more administrative-minded; rather, according to the term used by Dr. Mahalanobis, they have a sense of officialisation of the science. So, they feel that the Ministry would ask them as to what had gone wrong in the institute, whenever such a resolution is brought to the notice of the Ministry. Therefore, the director sits on the resolution for six months. There is a reminder from the union, and again the director sits on the resolution for some more time. The ultimate result is that the workers get frustrated and come to the conclusion that there is no benefit of associating themselves with any union.

Further, if a scientific worker becomes a little active in the union activities, he is also victimised and is told, "you devote so much time towards the union activities and you do not look to your own work."

With these words, I commend my Resolution to the House.

Mr. Chairman: Motion moved:

"This House calls upon the Government to appoint a Commission consisting of Members of Parliament, eminent scientists and administrators, to investigate and enquire into the working conditions of the research scholars and scientific workers in various scientific institutes in the country."

Shri Narendra Singh Mahida: Sir, on a point of order. There is no quorum in the House.

Mr. Chairman: The bell is being rung. Now, there is quorum.

श्री सिद्धेश्वर प्रसाद (नालंदा) : सभापति महोदय, अभी मेरे मित्र, श्री मल्होत्रा, ने हमारे देश में वैज्ञानिक अनुसन्धान की स्थिति के बारे में जांच करने के लिए एक आयोग की नियुक्ति सम्बन्धी जो प्रस्ताव प्रस्तुत किया है, मैं उसका समर्थन करने के लिए खड़ा हुआ हूं ।

इस समय हमारे देश में आर्थिक विकास की जो स्थिति है, उस को देखते हुए वैज्ञानिक अनुसंधान में विशेष दिलचस्पी दिखाना बहुत जरूरी है । आर्थिक विकास तब तक हमारे देश में सम्भव नहीं है, जब तक कि वैज्ञानिक अनुसन्धान का काम बहुत काफी तेजी से आगे नहीं बढ़ता है । इसलिये इस दृष्टि से भी हमको वैज्ञानिक अनुसन्धान की प्रगति की ओर विशेष ध्यान देने की जरूरत है ।

एक दूसरा दृष्टिकोण यह भी है कि खास शिक्षा के दृष्टिकोण से और वैज्ञानिक विकास के लिये यह बहुत जरूरी है कि हम वैज्ञानिक अनुसन्धान के कार्य को काफी विकसित करें और उसके लिए सब सुविधायें उपलब्ध करने की कोशिश करें । जब तक हम ऐसा नहीं करते हैं, तब तक शिक्षा के क्षेत्र में वैज्ञानिक विकास नहीं हो सकता है ।

इसलिये किसी भी दृष्टिकोण से हम विचार करें, यह बिल्कुल स्पष्ट है कि हमारे देश में वैज्ञानिक अनुसन्धान की प्रगति के लिए सब प्रकार की सुविधाएं देने की जरूरत है । लेकिन, जैसा कि इस रेजोल्यूशन के प्रस्तावक, श्री मल्होत्रा, ने अनेक आंकड़ों से हर तरह से साबित किया है, हमारे देश में वैज्ञानिक अनुसन्धान की स्थिति बिल्कुल अच्छी नहीं है । न तो हम वैज्ञानिक अनुसन्धान कर्ताओं को उचित सुविधायें देते हैं और न उनके लिये ऐसे साधनों को प्रस्तुत करते हैं, जिनके आधार पर वैज्ञानिक अनुसन्धान के क्षेत्र में संतोषजनक स्थिति उत्पन्न हो सके और उसकी समुचित प्रगति हो सके ।

श्री मल्होत्रा ने बताया है कि किस प्रकार १९४७ के बाद भी हमारे देश में इस क्षेत्र में कोई विशेष प्रगति नहीं हुई है । सामान्य शिक्षा में दिलचस्पी लेने वाले या वैज्ञानिक कार्यों में दिलचस्पी लेने वाले इस स्थिति को समझते हैं कि अनुसन्धान का कार्य तब तक सम्भव नहीं है, जब तक कि काफ़ी सुविधायें न दी जायें । आर्थिक सुविधा भी दी जाये और साथ ही यह भी जरूरी है कि जो लोग वैज्ञानिक अनुसन्धान के कार्य में रत हैं, उनकी स्थिति को सम्मानजनक बनाया जाये, लेकिन हमारे देश में इन दोनों में से एक भी स्थिति नहीं है । न हम वैज्ञानिक अनुसन्धान करने वालों को आर्थिक दृष्टि से कोई विशेष सुविधा दे पाते हैं और न वैज्ञानिक अनुसन्धान में लगे रहने वाले व्यक्तियों को, वैज्ञानिकों को इस देश में राजनीतिज्ञों की तुलना में या प्रशासन के कार्य में लगे व्यक्तियों की तुलना में सम्मानजनक ही माना जाता है । ऐसी स्थिति में हम देखते हैं कि कुछ लोग रिसर्च वर्कर या रिसर्च फेलो के रूप में अपने नाम दर्ज करवा लेते हैं और कोई दूसरा काम मिल जाने पर छोड़ कर दूसरी जगह चले

[श्री सिद्धेश्वर प्रसाद]

जाते है । इस प्रकार वास्तव में वैज्ञानिक अनुसन्धान की जिस रूप में प्रगति होनी चाहिये, उस रूप में वह नहीं हो पाती है ।

हमारे सामने प्रोफ़ेसर महलनवीस का एक छोटा सा लेख है, जिसमें उन्होंने इस बात की ओर संकेत किया है कि अगर हम अपने देश का आर्थिक विकास करना चाहते हैं, तो ऐसी स्थिति में यह बहुत जरूरी है कि वैज्ञानिक अनुसन्धान के क्षेत्र में प्रगति हो और उसकी तरफ हमारा ध्यान जाये । इसी लिये उन्होंने बताया है कि

"The best way of utilising the raw materials and natural resources available within the country, for both domestic consumption and for exports, can be found out only through applied scientific research. Applied research, in its turn, must be based on advances in fundamental research. Also, to establish an adequate base for applied research it is necessary to promote the spirit of pure research and supply the stimulus of scientific criticism. This would be possible only when at least a certain minimum number of scientists are engaged in fundamental research, and opportunities for pure research are becoming increasingly available."

ऐसी स्थिति में हम देखते हैं कि हमारे देश है न फ़ंडामेंटल रिसर्च के लिए कोई सुविधा है और न एप्लाईड रिसर्च के लिए । जहां तक फ़ंडामेंटल रिसर्च का सम्बन्ध है, सरकार ने देश में बहुत सी नेशनल लैबारेटीज़ बनाई हैं । उनमें जो वैज्ञानिक हैं, वे अनुसन्धान का काम करते हैं । इसके साथ ही विश्वविद्यालयों में विज्ञान के जो प्रोफ़ेसर हैं, चाहे वे फ़िजिक्स का शिक्षण देते हों और चाहे केमिस्ट्री, मेडिसिन या एग्रीकल्चर का, उन के ज़िम्मे भी अनुसन्धान का काम है, लेकिन जो लोग विश्वविद्यालय की शिक्षा से थोड़ा भी सम्बन्ध रखते हैं, वे जानते हैं कि विश्वविद्यालयों का वातावरण राजनीति के कारण बहुत गन्दा हो गया है । इसके अतिरिक्त विश्वविद्यालयों के वैज्ञानिक विषयों के प्रोफ़ेसरों को विद्यार्थियों को पढ़ाने का दूसरा इतना काम करना पड़ता है कि जिसकी वजह से उन में अनुसन्धान के लिये कोई भी दिलचस्पी नहीं रह जाती है ; न उनमें रुचि रह जाती है और न इसके लिये उन्हें किसी प्रकार की सुविधा ही दी जाती है । मैं चाहता हूं कि उनकी तरफ सर्वाधिक ध्यान दिया जाये । ऐसा भी देखा जाता है कि जो लोग विदेशों से विज्ञान के क्षेत्र में ऊंची ऊंची डिग्रियां प्राप्त करके आते हैं उनको यहां जब काम मिल जाता है तो अनेक कारणों से उनका उस ओर से लगाव कम हो जाता है और वे फ़ंडामेंटल रिसर्च का काम, विज्ञान के क्षेत्र में नहीं कर पाते हैं । ऐसी स्थिति में यह ज़रूरी है कि इन सारी बातों की जांच करने के लिए सरकार एक ऐसे कमिशन की, एक ऐसे आयोग की नियुक्ति करे जो सारी परिस्थितियों पर गौर करे, जो सारी चीज़ का अध्ययन करे और जांच करके पता लगाये कि क्या वजह है कि हमारे देश में वैज्ञानिक अनुसन्धान का कार्य जिस रूप में होना चाहिये था और इस क्षेत्र में जिस रूप में प्रगति होनी चाहिये थी, क्यों नहीं हुई है और आगे के लिए उपाय सुझाये ।

जैसा कि मैंने अभी बताया है, अगर हम शिक्षा के क्षेत्र में प्रगति करना चाहते हैं इस वैज्ञानिक युग में तथा दूसरे क्षेत्रों में प्रगति करना चाहते हैं तो बगैर वैज्ञानिक अनुसन्धान के नहीं कर सकते हैं और दूसरे देशों के साथ अपना कदम जब तक मिला कर हम नहीं चलेंगे तब तक हम आगे नहीं बढ़ सकेंगे, बहुत पीछे रह जायेंगे । सदियों की गुलामी के कारण वैसे ही हमारा देश पिछड़ चुका है और खास तौर पर वैज्ञानिक क्षेत्र में, वैज्ञानिक अनुसन्धान के क्षेत्र में तो वह काफी पीछे पड़ गया है । हमारा ध्यान, इस वास्ते, जब तक इधर नहीं जाता है तब

तक हम हर्गिज इस लायक भी नहीं रह जायेंगे कि आर्थिक क्षेत्र में भी, जैसे हम चाहते हैं, तरक्की हो, वह हो सके। बड़ी बड़ी योजनायें बना कर तथा उनको कार्यान्वित करके हम अपने देश को आगे ले जाना चाहते हैं। इसलिये आर्थिक विकास भी बहुत आवश्यक है। लेकिन इसके लिये भी यह बहुत जरूरी है कि हम वैज्ञानिक विकास को समझें, उसके महत्व को समझें। मैं आपके सामने एक दो सुझाव रखना चाहता हूं। वैसे अगर सरकार एक कमीशन नियुक्त करने की बात को मान लेती है जो इस सब की जांच करे तो न सिर्फ सारी चीज़ सामने आ जाएगी बल्कि हमें यह भी पता चल जाएगा कि कैसे हमारे देश में वैज्ञानिक अनुसन्धान का काम आगे बढ़ सकता है। मगर जब तक ऐसा नहीं होता है तब तक मैं समझता हूं, यह बहुत जरूरी है कि जो लोग अनुसन्धान के क्षेत्र में लगे हुए हैं उनको वेतन ऐसा दिया जाये जैसा कि उन जैसी योग्यता रखने वाले अन्य व्यक्तियों को दिया जाता है और जो दूसरे क्षत्रों में काम करते हैं। यदि ऐसा होना है तो उनमें लोभ की भावना पैदा नहीं होगी और अनुसन्धान के कार्य को छोड़ कर व दूसरे क्षत्रों में नहीं जायेंगे। यदि उनको मामूली कम वेतन मिलता भी है तो भी मैं समझता हूं कि वे इस कार्य को छोड़ कर दूसरे क्षेत्रों में नहीं जायेंगे। सरकार को यह भी चाहिये कि इस क्षेत्र में लगे हुए लोगों को जो जो सुविधायें चाहियें, वे उनको वह सुलभ करें। अगर उनको आर्थिक सुविधायें दी जायें तो कोई कारण नहीं है कि वे इस क्षेत्र को छोड़ कर दूसरे किसी क्षेत्र में चले जायें।

कुछ दिनों पहले प्रोफ़ेसर हाल्डन का मामला हमारे सामने आया था। ऐसे विश्व विख्यात वैज्ञानिक को भी हमारी केन्द्रीय सरकार पर्याप्त सुविधायें नहीं दे सकी जिसकी वजह से वैज्ञानिक क्षेत्र के अपने काम को छोड़ कर उनकी इस जगह से दूसरी जगह जाना पड़ा। जब प्रोफेसर हाल्डन जैसे विश्व विख्यात वैज्ञानिक को भी आवश्यक सुविधायें नहीं दी जाती हैं वैज्ञानिक अनुसन्धान के लिये तो फिर साधारण सा वैज्ञानिक जो कि अनुसन्धान के कार्य में लगा हुआ है, उसको हम कैसे सुविधायें दे पायेंगे, तथा कहां तक दे पायेंगे यह तो केवल अन्दाज़ करने की ही बात है। मैं समझता हूं कि केवल इसी एक उदाहरण से सारी स्थिति स्पष्ट हो जाती ह। ऐसी स्थिति में हमारे देश में न तो फंडामेंटल रिसर्च का काम बहुत महत्वपूर्ण हो पाता है और न ही एप्लाइड रिसर्च का ही काम हो पाता है। इसका मैं एक उदाहरण देना चाहता हूं। वनस्पति में रंग मिलाने का जो काम है वह बहुत महत्व का है। उसके लिये कोई कदम नहीं उठाये जा रहे हैं और न ही आज तक वह हो सका है। इस सारी स्थिति में तथा इन सारी चीज़ों को सामने रखते हुए मैं समझता हूं कि जो प्रस्ताव आया है उसका समर्थन किया जाना चाहिये और मैं चाहता हूं कि इस सब की जांच करने के लिये सरकार एक आयोग नियुक्त करे ताकि हमारे देश में वैज्ञानिक अनुसन्धान का काम आगे बढ़ सके।

इन शब्दों के साथ जो मौका आपने मुझे बोलने का दिया है, उसके लिए मैं आपका धन्यवाद करता हूं और इस प्रस्ताव का समर्थन करता हूं।

Mr. Chairman: Shri Shree Narayan Das has tabled an amendment. Is he here?

An Hon. Member: No.

Mr. Chairman: Then, Shri Harish Chandra Mathur.

Shri Harish Chandra Mathur (Jalore): Mr. Chairman, my enthusiastic friend, Shri Malhotra, has done a service to this House and to the country by attracting our attention to a most topical subject of great importance to the country. Sir, today, in this age

[Shri Harish Chandra Mathur]

of science and technology, there can be nothing more important then the development of science and technology on sound lines and taking that science and technology from the laboratories to the fields. This country could say with a sense of pride that at the very outset, immediately after independence, even before we had thought about our First Five Year Plan, the Prime Minister's attention was riveted on this all-important subject, and today, after all these years, we are reminded of the great service rendered in this connection by Shri Bhatnagar, who was the first Secretary as well as the Director of scientific research. He had gone into the work with a vision and dedication and by taking personal interest at every stage, through the great support of the Prime Minister, what has been achieved in this country is not being realised today. It was only in this field, that the country could establish and fulfil—not only fulfil the target of the First or Second Plan but could go ahead of the Plan targets—our objective of establishing national laboratories which are the citadels for research and progress. We have thus established 27 national laboratories in this country today and any country could be proud of this achievement. There is no country, I may say, which has a parallel in taking such concerted effort and giving top priority to the development of science and technology as this country has done.

While we deeply appreciate that, I am quite at one with my hon. friend, Shri Malhotra, who complained, and very rightly so, that it was the effort of only certain individuals and the over-powering personality of the Prime Minister and his attachment to science and technology that has brought about these laboratories. But the question is whether these laboratories, even when established, have got the right atmosphere and the proper conditions for carrying forward research and technology for which they were established.

My first feeling is that in spite of the Prime Minister's personal interest in this subject and his viewpoint, the entire Cabinet need to be re-oriented in this matter of their approach to science and technology. The Ministry has got to be re-oriented regarding its approach to science and technology. The other day while we were discussing the terms and conditions of service of scientists—I do not remember when—participating in a certain discussion I pointed out on the floor of the House how inadequate their remunerations were and how unfavourably they compare with those of the administrative services.

The hon. Minister who was in charge of the department said that they were more than satisfied with their grades, we have done quite considerable lot in this matter and if anybody had the aptitude for science we could get them for these grades and conditions. If this is the feeling of the hon. Minister, how can we expect the real conditions which are necessary for the advancement of science and technology? If the Minister is satisfied and if he just throws cold water over their demands, nothing can come about. I will just point out to the hon. Minister, point by point, how uncharitable we have been to the scientists and engineers of our country and how we have failed to create real conditions which would be conducive for real research and to take research further and further ahead.

If my hon. friend, the Minister in charge of this subject, would just read even the report of the University Grants Commission, the interim report about the re-organisation of universities, he would find that they have pin-pointed the attention of the whole nation on a particular subject, and that subject relates very much to the portfolio of the hon. Minister.

17 hrs.

We have two university students to a population of 1,000 in this country

as also in the U.K. So, our university education has advanced that much. But what is the difference between university education in the U.K. and in this country? In the U.K. you will find that 50 per cent. of those people who go to the university are there for post-graduate studies, scientific research and all that. They are engaged in that. But there is just the opposite here which is clearly indicative of the fact that we have not yet been able to create that climate for scientific research even among our university students.

What is the problem before the administration today? Only the other day I was reading a very illuminating essay written by an American professor who had made certain studies of our administration. Talking about administrative reforms the first thing that he said was that now the whole change has got to be from administration to scientific development. What is our problem today? What are our plans today? What have we got to do in the present atmosphere? The present problem is not of administration as it used to be ten years earlier. The present problem is that of development of science and technology and to find a channel in the administration to take science and technology to the field.

Mr. Chairman: Does the hon. Member want to speak for some time?

Shri Harish Chandra Mathur: Yes, Sir

Mr. Chairman: Then he may continue next time.

17.02 hrs.

BUSINESS ADVISORY COMMITTEE

FIFTH REPORT

Shri Rane (Buldana): Sir, I beg to present the Fifth Report of the Business Advisory Committee.

17.02½ hrs.

The Lok Sabha then adjourned till Eleven of the Clock on Saturday, August 25, 1962/Bhadra 3, 1884 (Saka).