acquisition and excessive expenditure on excavating ponds.

3. *Exploitation.*—It has been shown that river fisheries are of supreme importance to the whole scheme of inland fishery development and, therefore, require to be carefully safeguarded by an adequate conservancy and observation staff. A very large proportion of the fish on the markets I have visited comes from the rivers, giving livelihood to large colonies of river fishermen. The scheme of exploitation, therefore, contemplates bringing these fishermen and their operations under the control of Government. To ensure an adequate supply of fish at reasonable rates in important consuming centres, Government may have to launch schemes of capture and supply at least for the duration of the War. In most Provinces and States Government being the largest owners of fisheries, even after the War, if the local trade is incapable of immediate improvement and co-operative agencies cannot be organized, Government will have to initiate fishing and marketing themselves. It should also be explained here that though the Government are the chief producers there is no intention of supplanting the trader or fishmonger wholesale. A model shop at important centres with fixed prices is all that is proposed to be run by Government to stabilise prices with the attendant reforms in hygiene and cleanliness, etc.

Exploitation involves capture, handling, preservation, transport, disposal of waste and manufacture of by-products, all of which it will be the duty of the marketing staff to develop with the assistance of the technical staff of the fisheries organizations. Experience has shown that a great deal can be done for improving the indigenous catching methods. Flooded rivers and deep and perennial tanks go practically unfished as fishermen generally lack efficient craft and tackle. Proper dressing, adequate refrigeration and rapid transport by motors are other new reforms which have already given satisfactory results with reference to three towns in the U.P. Although there may not be any surplus and nearly all fish will be sold fresh, it is possible to utilise fish offal and waste resulting from the dressing of fish for conversion into manure, meal or oil, while the abundant supply of small fish of the Chilwah type at dams as well as Hilsa might afford facilities for canning on a small scale. Model nets and boats, a refrigeration plant and suitable model apparatus for trying out experiments in canning, curing, smoking, extraction of oil and manufacture of manure and meal have to be provided for in the estimate for the Headquarters technological laboratory.

Conclusion

In conclusion, all the three sets of operations, conservancy, culture and exploitation need specially trained and thoroughly qualified staff. Such staff is not available and will have to be carefully selected and trained for the purpose. Of the three, conservation and culture are highly technical operations and the staff for these operations need specialised and prolonged training under qualified supervision. It should not be so difficult to recruit competent men for exploitation, though fishery technology from methods of capture to the finished product on the market, needs special training which is available at Madras. If the efforts of the Government of India to provide training at Calcutta or Madras should succeed it should help in the training of fishery officers for the Provinces and States. Thus in the course of a year or two the locally trained men for subordinate posts should be available while the superior posts will have to wait the return of foreign-trained men. During the interval there is no alternative to using such men as are available in India for temporarily filling the posts.

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INDIAN SCIENTISTS' DELEGATION ABROAD

IN a message dated Washington, December 11th, *Reuter* announced the arrival in the U.S.A. of the delegation of Indian Scientists after completion of their sojourn in Great Britain. The delegation have thus completed the first part of their itinerary abroad and have before them a eight-week tour of the States under the joint auspices of the Agent-General, the National Research Council and the State Department.

These visits, our readers will remember, were sponsored by the Government of India primarily to enable Indian scientific men to contact their confreres in Great Britain and America and to explore, in a broad and tentative manner, how best such contact and cooperation could be maintained and developed to mutual advantage. The visit to Great Britain is in a way sequel to and a return of the compliment paid by Prof. A. V. Hill who toured India a few months ago. But, it is in no sense a mere courtesy visit having, as it does, certain well-defined objectives. The Indian delegation is headed by Sir S. S. Bhatnagar, the other members being Sir J. C. Ghosh, Prof. M. N. Saha, Prof. S. K. Mitra, Prof. J. N. Mukherjee and Dr. Nazir Ahmed. These names are too well-known, especially to readers of *Current Science*, to need a *Who's who*. A message from London stated that membership of the delegation had been deliberately confined to eminent men of science in India who occupied positions of administrative responsibility.

The activities of the delegation during their stay of about six weeks in Great Britain could only be glanced from the brief messages appearing on and off in the daily press. It makes melancholy reading to learn that even in England, the key press have paid but scant attention to the sayings and doings of the delegates in their midst. Obviously, science is scarcely "Good-copy" for the average newspaper although one must add that war-time conditions are partly responsible for the apparent apathy.

The "high-lights" during what can only

surmise must have been a very crowded programme and which the press recorded were the introduction of the delegates by Sir Henry Dale, President of the Royal Society, to His Majesty who graciously received them; discussions with the members of Parliament interested in Science; several receptions by Government, Civic bodies and academic and learned societies (during one of which, by the way, some historic documents pertaining to the Royal Asiatic Society of Bengal were presented back to the Society through one of the delegates), and a press conference besides many functions of a social nature.

In the absence of fuller details, it would not be fair, even if possible, to comment on the statements and speeches of the members of the delegation cryptic summaries of which have been cabled to this country. It looks as though the members have been individually expressing themselves on subjects which they are specially interested in, rather than the delegation as a body give out its views through one of its members acting as the spokesman of the delegation as a whole—a procedure which is the usual international practice when a body of representative men are on a formal visit outside their own country. The role of science in post-war reconstruction in India, the establishment of a bureau in London to act as a *liaison* body between the two countries in all matters pertaining to or affecting science, recruitment of personnel for Indian research institutions, exchange of students and professors, facilities for training and research for Indian students and technicians in the British Universities and workshops, purchase of scientific instruments and equipment, and, the increasing use of Indian Cotton by the Lancashire Textile Mills, are amongst the diverse topics on which the delegates are reported to have expressed themselves. Even a mere listing of these subjects, by no means exhaustive, is indicative of the many facts of a big problem which the delegation is called upon to handle. And, we have no doubt that the members, every one of whom has close and many-sided contacts with the Indian Scientific World and therefore are in an exceptional position to know of Indian requirements and possibilities, will have voiced the Indian point of view on those subjects with ability and distinction.

Finally, it must not be forgotten that during such visits, the personal contacts made—the reunion of old friends, the formation of new friendships, in short the impact of personalities and ideas—are fruitful of results even more enduring than the formal agreements and conclusions reached. It is for this reason, if for no other, that we must regret that the delegation could not, for want of time, accept the very kind invitation of Ireland to visit that country *en route* to the United States. And, for a full account of these aspects of their visit, we must perforce await the home-coming of the delegation to which we look forward with lively anticipation.

PRESENTATION OF SIR C. R. REDDY NATIONAL PRIZE TO SIR C. V. RAMAN, Kt., F.R.S., N.L.

THE eighteenth Convocation of the Andhra University was held on 18th November 1944 in the Andhra Christian College, Guntur, when His Excellency the Governor of Madras and Chancellor of the University, presided. Two notable events were the award of the Honorary degree of D.LITT. to His Excellency the Hon'ble Sir Arthur Oswald James Hope, G.C.I.E., M.C., and of the Sir Chattamanchi Ramalinga Reddy National Prize in the fist year of its inception to Sir Chandra Sekhara Venkata Raman for eminent merit in Physics. The prize is given each year for eminent merit in either Sciences, or Humanities or Fine Arts by a system of rotation, the cost being met from the interest accruing on the capital sum of a munificent donation given by Sir C. R. Reddy to the Andhra University. Sir Chandra Sekhara Venkata Raman was presented to the Chancellor in suitable terms by Prof. S. Bhagavantam, the University Orator in English. In the course of this oration Prof. Bhagavantam said: "It will take many pages to enumerate the discoveries made by him and the ways in which he has contributed to the advancement of Science. To have discovered new facts is in itself a sign of merit. Sir C. V. Raman has, in addition, discovered a new method of discovery, which is being fruitfully applied all over the world in various fields of research. He has given to Science a new eye with which to explore Nature. Honours have deservedly poured upon him in abundance. The Royal Society of London elected him to its Fellowship in 1924. The British Government conferred a Knighthood in 1929. He received the Nobel Prize for Physics in 1930. Amongst his other Scientific Honours may be mentioned, as specially noteworthy, the Matteuci Medal of Italy, the Hughes Medal of the Royal Society, and the Franklin Medal of America. He has received *Honoris Causa Doctorate* Degrees from nine different Universities. This number, Sir, was eight a month ago. It is now nine and I reliably understand that it will become ten a month hence. It appears to increase more or less at the same rate at which the number of Indian Universities is increasing in recent years. He is an Honorary member of many Learned Societies; and he is the Foundation President of the Indian Academy of Sciences which enjoys a global renown. More than his individual achievements, great as they are, is the glory of having trained a large number of young men, one of whom is an F.R.S., who are making a name for themselves by their creative output and are such inspiring figures in a large number of Universities in India. A Scientist is not a prophet in the astrological sense; I do not know if I am transgressing my bounds by trying to anticipate the verdict of History; but in my humble opinion, Ramanujam and Raman bid fair to be regarded as a Class by themselves and as men who have secured for India a towering place in the Republic of Modern Science."