

information regarding economic pisciculture and entomology. From the triennial report of the Director, we understand that he has submitted to the Government of India proposals for the extension of the department and increase of grants, and, in considering these proposals, we have no doubt that the authorities, while Indianising the services, will also provide them with the necessary means of maintaining their high standard of efficiency and traditional reputation.

Control of Drugs in India.

THE menace of drug adulteration and of traffic in spurious drugs prevalent in India at the present time was the subject of an address by Lieut.-Col. R. N. Chopra, before the Calcutta Rotary Club last month. The speaker showed that the market in India was being flooded by unscrupulous traders with drugs and chemicals of defective strength and impure quality and that potent remedies such as sera, vaccines, gland products and compounds of arsenic and antimony were being freely sold to the public without their quality being tested. The practice was a great menace to the public health and called for prompt institution of efficient safeguards to ensure the quality and authenticity of medicinal preparations offered for sale to the public. There is no doubt that India is *par excellence* the dumping ground for every variety of quack medicines and adulterated drugs manufactured in all parts of the world and that her markets are glutted with useless and deleterious drugs sold by unqualified chemists who are themselves a public danger. That this state of affairs has been going on for some years is shown by the fact that in 1930 the Government of India appointed a small *ad hoc* committee under the chairmanship of Lieut.-Col. Chopra to explore and define the scope of the problem and to make recommendations. The committee started work in October 1930, toured all over India and received a large mass of varied and voluminous evidence both written and oral. It considered carefully and systematically all aspects of the question and in April 1931, made comprehensive and far-reaching recommendations. It is nearly five years since the committee completed its labours and made its report but no action has been taken by the Government and the speaker showed that the position has gone from bad

to worse. There is no doubt that all classes of drugs, those belonging to the British Pharmacopœia, those not officially recognised by the pharmacopœia but known and approved medicines including the group of biological products such as sera, vaccines, preparations of animal glands, organometallic compounds, and lastly the group of patent, proprietary and secret remedies are all equally affected. Col. Chopra went into detail of how these different groups were affected and described what was the effect of the substitution of genuine medicinal products by rubbish, which, according to him, has now reached a very serious stage. In diseases such as pneumonia, diphtheria, etc., it may make all the difference to the life of the patient whether he is getting a drug of proper strength or an adulterated or useless preparation. In the case of the complicated organometallic compounds, if they are not properly prepared and tested and in a state of absolute purity, their use will be positively dangerous and fatalities may occur. In the case of biological products incalculable harm may follow the use of products which are improperly prepared or stored. The injection of faked insulin in cases of diabetic coma may lead to the death of the patient. Much harm may result from the use of patent and proprietary and secret medicines in negative as well as positive ways. A patent medicine might be injurious and cause direct harm as in the absence of control some of the constituents may be positively dangerous. Some medicines might have the effect of masking early symptoms of serious and grave diseases and, assuaging them for a short period result in delay of scientific diagnosis and treatment. Col. Chopra performed a public duty of prime importance in bringing to their notice the grave danger the people are running in the absence of control over medicinal preparations. He emphatically pointed out that the Government is morally bound to take steps to rectify the present state of affairs.

The remedy has been suggested by the Drugs Enquiry Committee. The scheme put up by that Committee, which has been generally accepted as being sound and effective, consists of two parts, namely legislation and the machinery to collect and test drugs. As regards the first part, it is a matter of common knowledge that there is no enactment in the Indian legislature at the present time which aims directly at the

prevention of adulteration or which ensures conformity to proper standards of purity and strength. Although most of the provinces have some sort of legislation, this is generally ineffective; moreover to bring about effectiveness and uniformity of control the legislation should be central and for the country as a whole. This part of the scheme would not entail any monetary expenditure and there is no reason why it should not be proceeded with immediately. Even if mere enactment of legislation by itself is not effective, it will produce a considerable moral effect and in that way will serve as a deterrent. Besides, if this is done time will be saved in future when funds do become available as along with legislation for the control of drugs, legislation, for control of the profession of pharmacy, which in India is still unorganised, will have to be enacted, and consideration of all these and drafting of the bill will naturally take time. The scheme worked out by the Drugs Enquiry Committee for the organisation, registration and training of this profession though it might need a small preliminary expenditure should eventually be self-supporting.

As regards the machinery to test medicinal preparations, this consists of a well-equipped central laboratory with competent staff of experts in various branches as well as provincial laboratories working under the guidance of the central laboratory. This part of the scheme undoubtedly needs an initial outlay and recurring expenditure. In actual practice, however, it will not be necessary to start with the complete scheme as drawn up by the Drugs Enquiry Committee at once so that the expenditure will not be very large in the beginning. The full scheme will take 3-5 years to develop and it will only be necessary to make a modest beginning which will not necessitate very great expenditure. By the time the scheme matures, a certain amount of revenue will be coming in and there is no reason why eventually the scheme should not be self-supporting or very nearly so.

So far as the Provincial Governments are concerned the scheme will also not be very expensive, as alarmists have suggested that it will be. With very little extra expenditure, the existing provincial laboratories could be so strengthened as to undertake the ordinary testing of drugs for the purpose of control. For complicated drugs they will have the central laboratory to utilise. We have no doubt that addition of two or three trained men, with modest salaries, to the existing staff of the provincial laboratories will be all that is necessary to carry out the work which will fall on these laboratories for several years to come. So far as the provision for the inspecting staff is concerned, the Drugs Enquiry Committee preferred the appointment of special drug inspectors not attached to any particular department. If, however, the appointment of these whole-time inspectors is too expensive under the present state of finances, the work can, for some years to come, be entrusted to the inspectors of the Excise Department. Little or no extra remuneration need be given to these officers, while the scheme is maturing the work thrown on them will be very light indeed. Later, when the whole scheme matures and revenue begins to come in from registration, licensing and fees for testing drugs, separate inspectors may be appointed.

The important point emphasised in the Report of the Committee, with which we emphatically agree, is that in any scheme of control the Central Government as well as Provincial Governments must take part. No system of control in which the Provincial Governments do not take their due share along with the Central Government will be feasible, or workable so that the responsibility lies on the heads of both. Public health is a transferred subject and the local legislators will be lacking in their duty if they do not realise their responsibility regarding drug control and let things continue as they are at present.