Sericulture in Mysore.

THE following is an abstract of the article on "Sericulture in Mysore" by N. Rama Rao, B.A. B.L., Superintendent of Sericulture in Mysore, in the *Journal of the Mysore Agricultural and Experimental Union.* Vol. VIII., No. 2, 1926.

Mysore is admirably fitted by soil, climate and local conditions for silk production. The industry is at present practised over about a third of the area of the State. There is practically no part of the State where climatic conditions do not admit of extension of the industry; the only limiting factor seems to be economic. The total area under mulberry is about 50,000 acres, the value of silk produced is over a crore of rupees, and the industry in its various branches supports about 200,000 families.

Mysore has a distinct race of silkworm which is polivoltine, and spins a greenish cocoon yielding a beautifully lustrous silk of excellent natural quality. The Mysore worm is hardy and highly resistant to disease, but is slow in arriving at maturity and a poor producer of silk in proportion to the food consumed, as compared with univoltine and bivoltine races. It is, however, one of the best polivoltine worms in existence.

Sericulture has an important place in the agricultural economy of the State. It employs that part of the labour of the home which is prevented by custom or feebleness from participating in the more strenuous work of the field, and also that part of the time of the *raiyat* which is left unfilled by the operation of the seasons. The utilization of factors which would otherwise go to waste is wholly a gain morally as well as materially, and one may claim for sericulture all that it is claimed for hand spinning of cotton, with this addition, that it is more profitable, as it turns to account certain differential advantages of climate and natural conditions.

The great bulk of Mysore sericulture is *subsidiary* to agriculture It is practised by small agriculturists, who, as a rule, do not employ paid labour, nor devote exclusively to rearing either time or house-room or other resources. They generally grow their own food, and depend on the returns from sericulture for clothing and condiments, and for the little extras which brighten their lives. But it must be mentioned that in parts of the State, sericulture has established itself as a *main* industry in successful competition with other occupations. This state of things is to be found in almost all the silk-producing parts of the State. In fact, in all important sericultural areas, there is a nucleus where sericulture is the principal industry. It may be noted that the same thing occurs in Japan. This concentration seems to take place under the following conditions:—

(1) The soil is more suited for mulberry than for other crops;

(2) The population is much greater than the soil can support if used for food crops, and there is in consequence necessity for a quick-yielding money crop which can remunerate intensive application of labour;

(3) Vicinity of large towns or important weekly bazaars affords facility for selling silk and buying foodstuffs and clothing;

(4) There are no competing industries which draw off labour.

Sericulture practised as a main industry is rather more sensitive to external conditions than the normal form and is therefore the first to suffer from unfavourable variations. This is due to the fact that the competition of other crops with mulberry and of other occupations with the rearing of silkworms is never absent, and makes itself felt when, for some reason, sericulture begins to weaken.

The Mysore rearer has on the average, half an acre mulberry with which he raises six broods of silkworms in the year.

He loses or used to lose about two of these crops owing to bad seed or inadequate knowledge and resources, but is able notwithstanding to make a net gain of about one hundred rupees a year. The average duration of a crop from start to finish is about six weeks.

In spite of obvious advantages, the story of Mysore sericulture is one of vicissitudes. In 1866 it had almost died out owing to disease or deterioration of silkworms, and was temporarily restored by the importation of Japanese seed. The root cause of decay however remained untouched, and one or two bad seasons upset this lightly built restoration. But the vitality due to favourable natural conditions enabled the industry to start with a new lease of life about 1890. It is significant that in this revival the imported worm had disappeared, and the Mysore worm emerged triumphant. Once again the industry declined, till in 1914-15, it reached its lowest point, with an acreage under mulberry of not much over 25,000. As a result of vigorous State action, the decline has been arrested and the growth natural to a healthy industry has been restored during the past ten years.

The efforts made to protect and develop sericulture are a measure of the growing recognition of its importance to the State. Not very long ago, the Education Department was entrusted with teaching sericulture through the agency of village schools with no great success. The subject was then taken up by the Economic Conference, and a few trained men were sent out for work to sericultural taluks. Each step rendered the scope for advance more obvious. Later the work was continued and developed by the Agricultural Committee of the Economic Conference, which did much to popularize disease-free seed and improve the methods of rearing. The causes of the decline of the industry were investigated and remedies proposed. The Committee's labours at this critical period in the history of sericulture proved that the situation was not hopeless, and indicated the lines of useful action. Gradually the work developed sufficiently to necessitate of the organization of a Sericultural Department.

The activities of the Department have been based on a close analysis of the structure and requirements of the industry. Investigation placed it beyond doubt that the instability of Mysore sericulture in the past was due to one or more of the following causes :—(i) Bad or insufficient seed, (ii) Faulty methods of rearing and reeling, (iii) Bad methods of purchase and sale—resulting in "sweating" at each stage, (iv) Want of economic stamina. That this analysis is in the main correct, seems borne out by the success of the action based upon it. The work of the Department falls under the following heads :—Education, Expansion, Improvement of seed supply, Demonstration and advice—help in case of silkworm disease. Loans, Formation of Co-operative Societies, Establishment of filature and popularization of Mysore silk, Improvement of reeling machinery and methods, and Investigation of markets for silk.

The sericultural parts of the State are divided into four circles, each provided with a well equipped Central Farm capable of attending to all the activities of the Department allotted to it. The central farms are in the

charge of officers called Senior Inspectors, most of whom have high academical and technical qualifications. Each central farm controls a number of subordinate farms, located at strategic points so as to command the sericultural area. There are altogether ten such subordinate farms. Their function is to keep in close touch with the *raiyats* to secure them their requirements in the way of mulberry cuttings, silk-worm seed rearing and reeling appliances, and loans, and to advise and guide them when necessary, to procure for them assistance such as disinfection, etc., in case of silkworm epidemics, and to render them generally all possible assistance in making the rearing a success.

In addition to the above, when work develops in a new area sufficiently to require continuous attention, outposts are established dependent on the nearest organized farm. These outposts are shifted from time to time according to requirement.

Every farm of the Department is a school for practical instruction, and profoundly influences rearing methods in the neighbourhood.

In co-operation with the District Board of Mysore and the Education Department, sericulture has been introduced as an examination subject in two selected Middle Schools.

Small rearers, who are frequently in need of loans for short terms have been guarded against the inclemency of the money-lender and are being greatly helped in their work by the following two methods—State aid through *takavi* loans, and the organization of co-operative credit.

Important experiments in silkworm breeding are carried out in the Central Farms at Mysore and Channapatna, covering practically the whole field of sericulture.

Sericulture has its roots in the economic life of the country and is necessary to its progress and happiness. Improvement of seed and technical methods would be barren of result without an organization that secures to the workers the full benefits of their labour. No industry can prosper without a power of adaptation to changing conditions and without the capacity to assimilate new ideas. Its progress depends on the readiness with which it can benefit by the advance of knowledge, and this requires alertness and power of internal adjustment, or in other words, a broad-based organization which can keep abreast of technical progress, and which can safeguard the industry by influencing production, and by securing an appropriate place in markets. The organization must begin in the village, with a co-operative society or panchayat; the co-operative societies, panchayat and leading agriculturists of a taluk may form a Taluk Association, and the process of federation may rise through taluk and district, till it culminates in a Central Silk Association for the State, capable of representing the industry and looking after its interests.