THE WAY OUT

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The complexity of the Indian situation, as it exists to day is so immense and the causes so complicated that it is wellnigh impossible to think of any one aspect as divorced from the other. Yet two problems, the unemployment of the educated and the agricultural backwardness of the masses do loom large on our socio-economic These two problems have during the past few years defied horizon. all attempts at solution and continue to make a demand on the constructive statesmanship of the greatest of us. And therefore any scheme or any course of action which combines in itself the solution entire or partial of these two important issues merits not only careful consideration but a bold trial, and it would be ideal if a solution of either problem can be achieved as a direct or indirect result of the other being tackled. Of the two issues, the unemployment of the educated middle class being considerably smaller in magnitude, can be tackled first and the enormous energies of educated youth can be liberated and harnessed to the advantage of "greater India". sure enough we will be nearer the solution of the rural problem with the field of scientific agriculture being so vast and so pregnant with potentialities, that it affords a promising field for the absorption of the energetic youth. If during the last so many years no considerable number of the educated classes has gone back to the land, it is due to no fault of theirs. Students from arts colleges found themselves unfit for the task, and even the graduates of agriculture lacked push and courage to fall back on their own resources. Above all, a secure and comfortable berth in Governmennt service as against the hazardous profession of agriculture held out more temptations. Circumstances have thus conspired to make the Indian youth develop a lethargic outlook with the result that he would rather remain unemployed than resort to an independent though risky profession, as agriculture is at Whatever may be the reasons for this deplorable the present day. state, the tragic fact has to be boldly faced and unless he is put on the land with all conveniences provided, even a graduate in agriculture is not likely to take to his profession in near future.

There are in all parts of the country vast stretches of land which can be profitably reclaimed to advantage and brought under scientific farming. Educated unemployed youths may be allowed to start farms on such areas with the financial aid and active inspiration of the Government. If any thing substantial is to be done these farms ought to be worked even as the Government farms are, only with this difference, that the responsibility of profits and losses is transferred to the individuals.

The graduates as they emerge in large numbers annually from the Colleges of agriculture should be absorbed into the system and should be promised a small allowance for a limited period of 3 years. During this period they should for some time be put on some farm to undergo practical training and later should be left with separate blocks of fields to work them out to an economic success. Once this is done the young graduate will begin to have confidence in himself and then a certain number (about 20 or 25) should be made to colonise in a readily accessible part of the country with separate areas of about 50 acres each but all situated near one another. Lands should be provided by the Government. Implements and livestock should be purchased on a co-operative basis. Large machinery like threshers, cane crushers, oil expellers, cotton gins, sprayers and other rarely used machinery should be common to them. All common articles like the above machinery should be under the control of a committee from amongst them, and should be supplied to one or the other according to the urgency of the work to be done.

Permanent improvemets on the land like levelling, provision of drainage, construction of permanent irrigation channels, residential houses and coolie quarters, sinking of wells etc. should be financed by the Government to be recovered, in easy instalments. The marketing etc. should be done together and the whole concern must be like that of a single closely knit family. An organisation like the above stands the risk of being condemned as one calculated to perpetrate the dominance of the educated middle classes unless demands of labour interest are adequately met. To get over this the colony in return to the Government aid may be required to be controlled by special laws and legislation for the regulation of labour charges. A share of \frac{1}{2} to \frac{2}{3} of net profit after deducting expenses on livestock machinery interest on certain items of capital expenditure etc. if divided among the labourers would easily satisfy them. This division of profits should not be carried out either for every crop or for every year, but should only serve as a guiding principle for fixing wages. From time to time a committee of labour leaders, officials, non-officials and representatives of proprietors may be appointed to go into the question more fully and fix up reasonable wages to be paid, subject of course to the fluctuations in commodity values.

It may be contended that for a collective practical farming scheme like the above the advanced knowledge of agriculture and its allied sciences afforded by the degree in agriculture is not necessary. But it can readily be seen that such an advanced state of knowledge is not only useful for the immediate purposes but will also give the small scale proprietor a fuller grasp of ultimate problems, economic, agricultural and political.

Culturally also they may form a single highly organised and efficient unit. They may be brought together not only for recreation but

for discussing kindred problems and arriving at solutions. Given facilities, such a colony will easily form the most efficient centre from which will emanate valuable literature in the form of bulletins and pamphlets now prepared solely by Government agencies. Moreover, the conclusions arrived at by these young pioneers will have the backing of actual field conditions and will embody in themselves a type of popular appeal which the Government literature is ever bound to lack in.

If these are to be of maximum use and educative value, they should be spread out all over the country and more particularly in densely populated areas, where intensive agriculture is the crying need of the hour. It may be difficult to get large tracts of lands in early stages but in course of time a popular organisation can easily buy up lands, where ever necessary, either in bits from peasants or in large areas from declining zamindaries or others in the grip of money lenders.

A colony of a thousand or less acres for every taluk will cause a stir in the agricultural consciousness of the masses and will achieve useful results the magnitude of which it is difficult to imagine today. Once this is done the department can relax its attention as regards agricultural propaganda to a considerable extent and can more elaborately and exhaustively turn its efforts to scientific research and general organisation. These centres of modern agriculture will soon grow in importance and will become seats of agricultural pilgirimage to the ryots, from where they will derive hope and inspiration for future. The scheme thus solves at one stroke, two knotty problems the employment of the uneducated middle class youth and propaganda for the betterment of the peasant. . The question will now arise, what happens to the labourers? The influence on them will be of a more farreaching nature. When wages are to be regulated by an impartial agency they are bound to rise to decent height and the competition will increase, as regarding employment in these colonies resulting in higher efficiencies. The proprietors having no way open to them to reduce wages as a result of competition will naturally resort to selection of better and more efficient men and hence as the demand for efficiency rises the general standard among the labouring class is bound to rise,

Thus within the folds of a single scheme on the lines indicated we solve to a considerable extent the rural and the urban problems and also greatly increase the national wealth of the land.

What is wanted is a bold policy and initiative by the Government, which if forthcoming is bound to bring in its train the solution of these great problems. And the scheme is so flexible as regards magnitude that there is absolutely no reason why our well to do zamindars should not rise to the occasion and become the torch bearers of the emancipation of rural India.

Will it be too much to hope that they will realise the gravity of the situation, and not only help their country but cover themselves with glory by their statesmanlike attitude, as worthy descendants of the aristocracy of the land, by readily agreeing to be pioneers in this scheme of tural development.

Whatever be the difficulties in the way a definite plan of action as outlined briefly above has to be done and that too quickly if the country is to be saved from the throes of an economic revolution. Will the facts be faced?

ORIGIN OF CITRUS SPECIES

Under the auspices of the Association of Economic Biologists, Coimbatore, Dr. Tanaka, Professor of Botany and Horticulture at the Imperial University, Foremosa gave a lecture on the origin of citrus species and varieties on the 14th evening. Dr. Tanaka who has been making systematic studies of the citrusses of the world for the last 25 years is an authority on the subject. In his very interesting lecture, he explained how the earlier classifications of the citrus group into genera and species were very defective and referred to a much more satisfactory classification adopted by him and the characters on which such classification was based. He described the geographical distribution of eich species in various parts of the world and pointed out that N. E. India was the original home of several of the species. Evidently these have been taken abroad in early times and many of the forms which are now either locally produced or imported from outside are improved types of these wild forms. He stressed the great importance of studying intensively these original homes of citrus varieties, as such studies might ensily result in obtaining forms more valuable than what exist today. He hoped that such studies will be taken up in India which should benefit not only India but several other countries of the world interested in citrus.

ABSTRACTS

The protection of Barley-seed through post harvest pollination. By Merrit N. Pope. (The Jour. of Her. Vol. 26 No. 10 October 1935. P. 411.) A record of a remarkably unique experiment, Four spikes of a barley variety (Hanncher C. 1. No. 531) with unripe pollen, were harvested, emasculated, and kept in distilled water; two days later, when most of the stigmas were receptive, these spikes were dusted with pollen from 2 other varieties. Fertilisation was evidenced in a few days and the seeds produced were sown in the next season and they produced spikes which showed their hybrid character, proving that viable seed can be produced by pollinating flower even after harvest.

M. R. B.

The Etiolation Shoot method of Fruit Propagation. By J. Lambourne. (Mal. Agri. Jour. Nov. 1935 P. 514-) The paper is a progress report of work done up to September 1935, on propagation of fruit trees, at the Central Experimental Station, Serdang, Malaya. Many of the trees experimented with, are familiar to us, including citron, guava, mango, jack, Eugenia, lemon, lime, orange, and even tamarind. Incomplete as the investigation up to the present stage is, the results are interesting as it has been found possible to propagate by the etiolation method, (Vide M. A. J. July 1935) a large number of plants. Among those which root freely, making it practicable to raise a large number of them from small plants, are the lime, the lemon, the guava, the Mandarin orange and the Eugenias. For the mango, the method appears to be too slow, but the author