Methods to be Adopted to Maximise Production and Development of Improved Strains and Plant Materials

By BHAGIRATHI PADHI

Maximisation of production depends upon three factors, namely cultural, Manurial and Varietal of crop material dealt with.

Cultural: So long as the improved Agricultural implements are beyond the scope of the anvil of the village smithy, either for repair or for replacement, it is impossible to introduce improved Agricultural implements on a large scale for bringing in the desired cultural development of the soil designed for improving the fertility and enhancing productivity of the soil. The Engineers of the State are very hopeful to start a large number of engineering Colleges and workshops to bring in improvements which could replace the time-honoured wooden implements with ease and profit. While considering the question of improvements of Agricultural implements the draft has to be improved in the same ratio to keep up the pace of such improvements in the working of the implements. For instance, the Gumsar Breed of Srikakulam District is of too short a stature for the plough and unless a better type of cattle can be bred the implements cannot be worked easily. Breeding stations for livestock improvement must definitely improve the local breed. The alternative is mechanical cultivation by power. There is demand throughout the country for more machinery but how long this demand would continue is problematic. Gradually waste lands are being used up, inch by inch, and cropped. Waste lands, if they are given to poor ryots, can never be brought into the best state of cultivation because of the poverty of the owners. Therefore many of the landlords owning large extent of waste areas are hesitating to utilise this opportunity to help the State in the maximisation of production to free India from famine through such doubtful methods. Secondly these machines come to repairs very often and there is the lack of sufficient engineering skill locally besides non-availability of parts to replace the worn-out or damaged parts. As such the targets fixed for each unit or for each District are difficult of being attained.

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Vast forests are being deforested allowing denudation and soil erosion on a large scale. This also affects the seasonal conditions of timely and sufficient rainfall. The above consequences, although not felt immediately are cumulative and are responsible for the reduced output per unit area and consequently the total output of the State. Therefore, legislation should come to the rescue for preventing merciless felling of forests.

Vast areas of land are available in the interior of the so-called unhealthy tracts and these have to be reclaimed and brought under the plough, either for growing food grains or for planting fruit trees or for converting them into pastures, all of which are essential for the maximisation of Production. Cutting of useful forests for selfish motives often mar the bonafide aims of States. Methods of prevention of soil erosion and conservation of soil moisture in extensive areas should mean floating of state loans for the purpose as for projects.

Land colonisation schemes when introduced in areas like Araku Valley and managed by experienced retired technical men can be expected to utilise the land for the best benefit of the state besides providing a decent living for such enterprising individual.

Manurial: The conditions prevalent in India do not appear to be encouraging for large scale use of chemical manures. Enervating seasonal conditions, the poverty of the cultivating class as a rule and the backwardness of the cultivators in general appear to be the main reason for this. Besides, the use of these manures involve certain conditions which are necessary for increased production. The most important factor is water. But this is lacking in many places and the high temperature helps to aggravate the common drought conditions, which instead of increasing productivity must therefore decrease production to the minimum. Therefore, unless and until the ryot realises the scope and limitations of utilising the fertilisers, it is not desirable to tamper with the healthy soils and thereby poisoning its very life resulting in its reduced productivity. Therefore, soils in India must be maintained in good heart through conditions of natural living, creating conditions suitable for harnessing the wealth from all the material sources available in and from nature. This is the most fundamental and organic side of the manure whether we speak of green leaf or excretion of animals or human beings or the so called waste material of all flora and fauna. These, if utilised, are going to keep India free from famine. The devil of drought will be kept at bay and the land maintained well in the matter of conservation of soil and so on besides improving soil texture itself by correcting acidity and salinity through adequate supply of organic matter for opening natural drains for the free drainage of water or maintaining soil moisture at an optimum for creating all the necessary conditions for increased production. The department has planned well for the improvement of organic manures through compost programmes and intensified this propaganda with due emphasis on the role of concentrated artificial manures and fertilisers.

Varietal: The importance is obvious and as such it has been realised fully by one and all without the need to stress the necessity for the evolution and multiplication of improved strains for increased production. But this subject also requires a master touch and that is, the

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importance of the maintenance of the purity of the particular strain or strains. The maintenance of the purity of the seed has to be observed from the flowering stage of the crop till it is harvested to keep it free from contamination or mixture. In the threshing floor and the store room due care in the art of preserving the purity of the seed has to be kept up.

The last item of vital importance in crop production is the needful protection to crops against pests and diseases for a healthy growth. The crop and plant protection service deals in detail with all this problem to help our departmental activities to maximise production through its improved strains and plant materials, which otherwise may not exhibit their maximum potentialities, not withstanding the adoption of correct cultural and manurial methods.

Utilisation of Agency Tracts in Maximising
Fruit Production*

By

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Introduction: Several schemes are under way to extend the area under food crops in this State. A comprehensive plan for the development of fruit of this State is yet to emerge. The hillmen of the Agency tracts are yet to understand that fruit should supplement the normal diet for better health. With the cry for more fruit to supplement rice for a well balanced diet, the hill ryot may now usefully divert his attention to the innumerable patches of uncultivated wastes fit for orcharding, at a time when the prices of fruit are attractive. At a time like this, the recommendations of the Royal Commission on Agriculture in 1928 as well as the National Planning Committee, have to be considered seriously. Cheema¹ observed that the development of the horticultural crops in this country has been neglected to a very great extent as compared with the development of cotton, sugarcane, oil seed and such other crops. Round about Anantagiri in Visakhapatnam district, stray trees of common pear, rose apple and coffee bushes were introduced long back. Mandarin, jack,

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^{*} Paper contributed for College Day & Conference, 1952.