

P A R T - V

ERGONOMIC IMPROVEMENTS SUGGESTED IN <sup>A</sup>THE FEW SELECTIVE  
AREAS IN INDIAN AGRICULTURE. ✓

### Introduction

Due to <sup>the</sup> application of machines to agricultural production, the burden and <sup>v</sup>drudgery of farm work has been reduced and the output per worker has been greatly increased (282). Farm mechanization has released agricultural workers to other industries (73). Now it has become increased utilization of non-human energy and of more effective use of machines and implements. Reduction of labour requirements, quicker and more production has been the principal motivating force in agricultural mechanization. Advances in farm mechanization have been made where a strong demand for labour in other industries has withdrawn workers from the land and forced wage rates up, as in the United States (73) and other countries improved in industries. Other contributions of farm mechanization <sup>and</sup> on the improvement of working conditions and the performance of jobs that would otherwise be difficult or impossible by hand methods.

India the village based country where ~~the~~ most of the villagers <sup>?'s</sup> till are living under poverty (22). So many researches have been done on betterment for agriculture and till now various attempts are going on, but man ~~by~~ <sup>it</sup> still remains unimportant. The present socio-economic condition, stated in Part II of this thesis, <sup>c</sup>of rural India discourages the acceptance of capital intensive methods. Further more, <sup>^</sup>according to lively-hood gradation, India is placed at 85th position in the world (283).

In Eastern India, large number of small plots of land with widely divergent soil and water surface, high frequencies of natural calamities etc., are cultivated by farmers and share-croopers with deplorable socio-economic condition and also by feudal land owners (1).

Labour forces here is not inadequate. To give food and shelter to all, every body should engage himself in work. For this reason, though mechanization in agriculture gives quicker and more production, in India the manual labour is not a subject to sweep away totally. Expansion of cottage industries in villages where the greater part of population live may serve well to progress India through the development<sup>of</sup> each Indian individuals.

So, in the view points of Ergonomics, the betterment of Indian Agriculture through improvemental modifications of conventional methods of work and existing designs of implements or new designs similar to existing ones, is preferable and is also accepted by the Government of India.

Imported technologies are always not suitable in ~~this~~ countries like India. The technologies in the parallel to Indian livelihood is required. ✕

The modifications should be made in improved quality of work, more efficient use of power or human and animal labour, greater durability, easier servicing and maintenance etc. Specification for new designs are based on features of successful competitive machines, surveys of users satisfaction, service experience with existing machines, market analysis, present trends in yields and cultural practices and recent technological developments (282).

Though there is no clear plan for rural development (284-288), from recent researches (66, 183, 289-292) for development of Indian agriculture in different parts of this country (24, 25, 28, 105, 106, 182-184, 188, 193, 293-304), Government of India is now going on improvising agriculture considering Indian conditions, as a third



long time during working, and 5. Consideration was of selec- ✕  
tion of right workers for right job.