

## CHAPTER I

### INTRODUCTION

Rice is one of the most important food crops grown in India. It occupies more than 41 million hectares of land which accounts for almost 30 per cent of the total rice area in the world (60). The average yield of rice in the country is barely 50 per cent of the world's average yield of 2.82 t/ha. During 1985-86, the annual production of rice was about 64 million tonnes, which constituted about 40 per cent of the total food grain produced in the country. This figure is required to be enhanced to 100 million tonnes to meet the projected demand of the country by 2000 A.D. (64).

The average power available on Indian farms from all sources is hardly 0.45 hp/ha, whereas the optimum figure required for intensive agriculture is 1 hp/ha (94). The availability of low power is considered to be one of the important reasons for getting such a low yield of rice. This has also been found to be a major bottleneck in adopting multiple cropping system in rice growing areas of the country. In order to increase land productivity under rice crop, it is, therefore, desirable to identify some of the important operations requiring high energy, and suggest ways and means to mechanize them.