APPENDIX XI

JAPANESE METHOD OF GROWING PADDY

The Japanese method of growing paddy, whereby high yields are obtained, has been discussed so much of late that it is desirable here to describe it only briefly. There is very little to be learnt by the best Indian farmer from this or any other method. It is doubtful if, even in Japan, as much as 11,152 lb. per acre of this crop has ever been harvested by this method; yet this is the yield secured by our prize-winner in the Indian crop competitions of 1952. What the Japanese method has done is to systematise or reduce to a universally applicable mode of operation, a procedure practised in varying degree by our best paddy growers for many years.

In the nursery the seed-bed is raised some three inches above ground level and may be of any convenient length. A space, a foot wide, is left between beds. This permits of weeding without injuring the seedlings. For each acre of paddy 1/20th of an acre is sown in the nursery for seedlings, and this requires about 20 lb. of seed. For each 25 feet of bed, about a mound (3 baskets) of compost or cowdung is worked into the soil. To this is added a pound of equal parts of superphosphate and ammonium sulphate. The surface is smoothed and then covered with fine compost about 1/8th of an inch thick. This again is covered with a thin layer of ashes. The bed is then ready for the seed which is planted at 1 lb. to about every 26 feet row.

*C. Hayashi, op. cit., pp. 96-97.
Before sowing, the seed of the variety most suited to local conditions is dropped into a bucket of salt water. The poor seed comes to the top and is skimmed off, saving only the heavier seed for sowing. The seed is sprinkled on the seed-beds a few days before the rains commence and the covering of fine earth 1/8th of inch thick spread over the seed. Should the rains be delayed, watering by cans is resorted to. Where canal or tank irrigation is available, sowings commence earlier.

About a week after the seedlings have come up, all weeds are carefully removed by hand. The seedlings are ready for transplantation when the sixth leaf has formed. The plant is 6 to 8 inches high at this time. It is better to be early than late with transplanting.

The field into which the seedlings are transplanted is ploughed immediately after harvest; then, following the first shower of rain, the field is ploughed again. All paddy fields being banded or embanked, all cracks in the bundha should be repaired before the rains. Manure is then applied in heavy doses. Green manure is advocated and 15 to 20 cartloads of compost or cattle-dung should be ploughed in before puddling. One hundred pounds each of ammonium sulphate and superphosphate (or bonemeal) is mixed well into the surface soil.

In the process of transplanting care is taken (a) to remove all weeds from the nursery before beginning, (b) to pull the seedlings out one at a time, and not to bruise the stems or break the roots, (c) never to plant more than 4 seedlings to each hole, (d) always to plant them straight rather than at a slant, (e) to hold the fingers of the hand ahead the side of the seedlings, pushing them into the soil ahead of the roots of the seedling and (f) to plant the seedlings 20 inches apart and 10 inches from row to row.
To speed the process of transplanting, two workers hold a
long string in a straight line. On the string are markers 10 inches
apart. The seedlings are inserted in the soil at the markers; the
string is then moved over 10 inches and planting at the markers
is repeated. Bamboo may be used instead of string.

After the crop has grown for two weeks, all weeds are removed.
A month after transplanting another dressing of 100 lb each of
ammonium sulphate and superphosphate is worked into the soil around
the roots of the plants. From now on a soil-scratching tool is moved
between the plants. About two weeks before flowering, all field work
is stopped.

It will be seen that an important factor in securing high yields
by this method is the liberal use of fertilizer, supplemented with
bulky organic manures like compost and cow-dung.