- STRUCTURE OF FARM HOUSEHOLDS BY SIZE OF CULTIVATED LAND
- 2. POWER CULTIVATORS AND TRACTORS. POWER SPRAYERS AND POWER DUSTERS. POWER REAPERS.

GREENHOUSES

### 1. Structure of Farm Households by Size of Cultivated Land

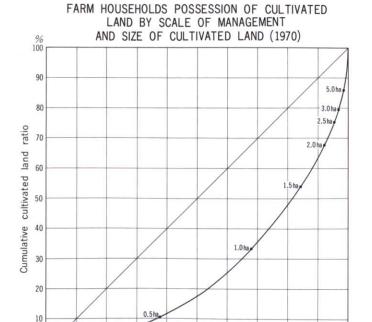
The area of cultivated land under the management of farm households has been on the decrease since 1960. As the ratio of the decrease in the number of farm households exceeds the percentage of the decrease in the area of cultivated land under the management of farm households, the average area of cultivated land per farm household has increased-i.e., 0.88 ha. in 1960, 0.91 ha. in 1965 and 0.96 ha. in 1970.

The greatest feature of the increase and decrease in the number of farm households since 1955 as classified by size of cultivated land under management lies in the fact that there has been a rise in the number of farm households belonging to the stratum whose cultivated land is large in size but that the farm households belonging to the stratum whose cultivated land is small in size have decreased in number. Another feature is that the diverg ing point between the increase and the decrease has been shifting to the stratum whose cultivated land is large in size. In other words, the diverging point was 1.0 ha. in 1955-60, 1.5 ha. in 1960-65 and 2.0 ha. in 1965-70 in prefectures other than Hokkaidō, where it stood at 3.0, 7.5 and 10.0 ha. respectively. A third feature is that those categorized as "exceptional farm households" drastically decreased in number in 1960-65 but increased in 1965-70.

In general, the greater the size of cultivated land under management, the higher the percentage of full-time farm households and farm households mainly engaged in agriculture, and the lower the percentage of farm households mainly engaged in other jobs.

When the farm households are classified, depending on whether they are engaged in owner or tenant farming, those engaged in owner farming account for 79.1%. The farm households engaged in owner-tenant farming in which the land cultivated in owner farming is larger in area than that in tenant farming are registered at 16.0%. The farm households engaged in small owner-tenant farming where the land cultivated in owner farming is smaller in area than that in tenant farming account for 2.9%. Besides, the farm households engaged in tenant farming account for 1.7% and the farm households classified as "exceptional farm households" 0.3%. The leased lands under cultivation total 297,000 ha. in area, accounting for 5.8% of the total area of cultivated land under management. The percentage of the area of leased land under cultivation to the area of cultivated land under management, when classified by prefecture, is highest in Okinawa Prefecture with 21.9%. It stands at 11.5% in Siga Prefecture and 10% in Kyōto and Hukui prefectures, the lowest ratio of 2.5% being registered by Aomori Prefecture. Salient Points of the Legend and Map Compilation

Cultivated land under management: This represents cultivated land under the management of farm households as of the date of the survey.



Cumulative farm households ratio

(Compiled from World Census of Agriculture and Forestry)

Interviews were conducted on actual area, as classified according to the land categories, without respect to the land categories and area described in the Land Registers.

## Sources

- 1. Ministry of Agriculture and Forestry, 1970 World Census of Agriculture
- 2. Ministry of Agriculture and Forestry, 1971 Okinawa Census of Agricul-

## 2. Power Cultivators and Tractors. Power Sprayers and Power Dusters. Power Reapers.

The mechanization of agriculture is in progress at a conspicuously rapid pace in proportion to the decrease in the availability of farm manpower and the growing tendency of shifting from full-time agriculture.

The operator-rider power cultivators and farm tractors available in 1971 totaled 271,000. The average number of machines owned per 100 farm households stood at 5.1. This figure increased by 14 times from 1965. In addition, 3,200,000 cultivators of the walk-along type were in use.

There also were 1,150,000 power sprayers and 1,250,000 dusters, up 1.9 times and 5.3 times, respectively, over 1965. The average number of machines per 100 farm households, when both types are included, stands at 45.6.

There were 582,000 power rice-wheat reapers and 84,000 head-feeding combines. The total number of both types of machines increased by 4.6 times from 1967. The average number of both types of machines owned per 100 farm households stood at 12.7. Of the farm households engaged in the planting of paddy rice, the percentage of those using power reapers was

A check of other types of agricultural machinery reveals that 31,000 manned rice planters and 46,000 power rice planters were in use. There were 119,000 farm households using rice planters, and the percentage of the area in which rice planters were in use to the area of rice planting stood at 3%. Also in use were 1,620,000 rice-wheat dryers, up 1.5 times from 1966. There also were 1,020,000 agricultural truck-autotricycles, 2.4 times more than in 1966.

The greenhouses (facilities for protected horticulture) in 1971 totaled 906,000 ares in area, up 2.8 times from 1965. Of these, the area of greenhouses equipped with heating facilities amounted to 260,000 ares accounting for 28.7% of that of all types of greenhouses. A check of the materials used for the construction of greenhouses reveals that vinyl houses accounted for 92.8%, glass houses 6.6%, and glass fiber-fortified houses 0.6%. The harvested area of greenhouses, as classified by crop, was 275,000 ares for cucumbers, 173,000 ares for tomatoes, 138,000 ares for strawberries, 116,000 ares for ornamental flowers, and 64,000 ares for eggplants.

## Salient Points of the Legend and Map Compilation

Cultivators of the walk-along type are not included in the figure for power cultivators and tractors. The values of the facilities for protected horticulture shown in the 1970 World Census of Agriculture and Forestry were used for greenhouses. The values represent the greenhouses, including vinylhouses, which are high enough to allow people to work in a normal position.

The Report of Annual Sample Census of Agriculture was referred to in preparing the figures for agricultural machinery and the World Census of Agriculture in working out the figures for greenhouses.

# Sources

- Ministry of Agriculture and Forestry, Report of Annual Sample Census of Agriculture, 1971.
- 2. Ministry of Agriculture and Forestry, 1971 Okinawa Census of Agricul-
- 3. Ministry of Agriculture and Forestry, 1970 World Census of Agriculture

RATIO OF INCREASE/DECREASE IN FARM HOUSEHOLDS BY SIZE OF CULTIVATED LAND UNDER MANAGEMENT (1960-1970)

