

Agriculture, characteristics, and challenges of the Amami Islands

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The percentage of agricultural workers, as a fraction of the number of employed individuals in the Amami Islands, is 13.5% (2015 census), considerably higher than the nationwide average of 3.4% and Kagoshima Prefecture average of 8.4%. Agriculture is an essential industry in the Amami Islands. I will provide an overview of Amami's agriculture, but since the Amami Islands consists of an "island," let's first look at the characteristics of island agriculture.

Generally speaking, islands are far from the mainland, surrounded by ocean, and small. The agriculture of such islands generally has these four characteristics.

(1) There is a disadvantage in terms of transportation. The island is small, so the market on the island is limited, and agricultural products will be shipped and sold to the mainland. Since the ocean surrounds the island, they need to transport items by boat or plane. This becomes expensive, the frequency of transportation is limited, and the delivery time becomes long.

(2) Production costs tend to become high. Lands are narrow on many islands, and it is difficult to conduct large-scale mechanized agriculture like that done on the plains of the mainland. Materials such as fertilizer tend to become relatively expensive when buying from vendors outside the island.

(3) There are few paddy fields. The island is small and without large rivers, so paddy farming, which requires a large amount of water, is often difficult to implement.

(4) There is a tendency to specialize in a few specific items. Items must be technically cultivated, bred, and sold for them to be viable for agriculture. Whether those items can be sold is partially determined by competition with other production areas, and given the above-mentioned disadvantageous characteristics, the items that can be sold are limited.

These are the characteristics of agriculture on islands. For farming in the Nansei Islands, including the Amami Islands, there are also weather conditions to consider.

(5) While more likely to encounter summer typhoons and severe drought, it is warmer than the mainland.

Based on these characteristics, let's take a concrete look at the item composition of Amami agriculture. The table shows the cultivated area and output of the main items in the Amami Islands. Sugarcane has the largest cultivated area, accounting for more than half of the total. Next are vegetables, which account for about 20% of the total. Nearly 80% of these vegetables are potatoes. This is followed by forage crops that feed cattle. This is also about 20% of the total. In other words, in terms of area, sugarcane, potatoes, and forage crops account for approximately 90% of the agriculture in the Amami Islands. Amami is no exception to the tendency of specializing in a small number of items, as in characteristic (4).

Incidentally, paddy fields, which occupy over half of the cultivated area of Japan, account for only 0.5% of the total in the Amami Islands, which is a characteristic (3) of island agriculture.

Meanwhile, different trends are seen when evaluating the amount of output. Beef cattle account for 33% of the total; sugarcane, 27%; vegetables, 23%; flowers, 10%; and fruit trees, 5%. Potatoes are the main vegetables; flowers include chrysanthemums and goldenrods; and fruits include mangoes and tankan. This means that flowers and fruit trees, which have a high proportion of output relative to area, have a high output per unit area.

Next, let's look at each item individually. Sugarcane is a rather special crop supported by national policy; it is also resistant to typhoons and droughts in the summer and will be addressed separately in the next article. Potatoes, beef cattle, flowers, and fruits are items that have become established by taking advantage of Amami's warm climate. Specifically, potatoes, flowers, and fruit trees are shipped when other production areas cannot ship their items (off-season) to avoid transportation disadvantages. Additionally, beef cattle have the advantage of fast production of feed, which is the food for cattle. Many flowers and fruits do not require additional heating. Therefore, these items are advantageous because they can be produced at a low cost.

In this way, the current agricultural items of Amami have established themselves by taking advantage of the (5) weather conditions of Amami to overcome the disadvantages of the (1) transportation aspects or (2) the high costs of island agriculture. These items are also the result of many years of hard work of farmers and stakeholders.

However, these are not unalterable. Market conditions are constantly changing, and the technology related to production, storage, and transportation is advancing every day. The competitive environment of agriculture will also change in the future. Under such circumstances, off-season shipments or cost competition alone may not respond well to change in the market and technology or may be depleted. Therefore, in addition to conventional efforts, measures to further increase the value of Amami's agricultural products must be promoted.

	Cultivated area		Output	
	ha	%	mil. yen	%
Sugar cane	8,448	55.3	8,556	26.7
Vegetables	2,935	19.2	7,324	22.9
Potatoes	2,295	15.0	5,334	16.7
Flowers	203	1.3	3,290	10.3
Chrysanthemums	73	0.5	1,117	3.5
Goldenrods	35	0.2	1,054	3.3
Gladiolus	53	0.3	421	1.3
Lilies	33	0.2	545	1.7
Fruits	587	3.8	1,441	4.5
Tankan	315	2.1	431	1.3
Mangoes	50	0.3	584	1.8
Passion fruit	19	0.1	204	0.6
Forage crops	2,888	18.9	—	—
Beef cattle	—	—	10,574	33.0
Others	210	1.4	829	2.6
Total	15,271	100.0	32,014	100.0

Overview of agriculture of the Amami Islands