

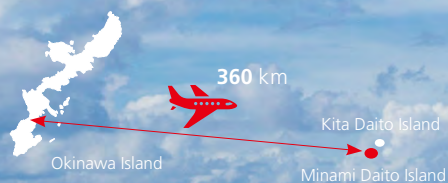
SPECIAL FEATURE

Special Feature 1 | Working with Customers to Revitalize Communities

Sharing in the Joys of Life on Minami Daito Island

As a Member of the Community on “Sugar Cane Island”

Minami Daito Island lies 360km east of the big island of Okinawa, Japan, about a one-hour flight from Naha City. Approximately 60% of the island's entire area is taken up by sugar cane fields, and the majority of the 1,400 islanders work in the sugar cane industry. The trucks of Hino Motors are also a part of this community, and they are helping to revitalize the island.



The relationship between SDGs and these initiatives



Minami Daito Island and the Sugar Cane Industry

Minami Daito was uninhabited until the 20th century, when 23 colonists from Hachijo Island in the Izu Islands chain arrived in 1900. Their aim was to cultivate sugar cane and establish the sugar industry here. Minami Daito's coastline is almost entirely made up of imposing cliffs, which had obstructed all attempts to develop the fishing industry on the island, since it was impossible to directly berth a vessel there. Furthermore, the hard

ground of the island meant that it was not ideally suited to farming. It also lay in the path of the fierce typhoons that pass through the region from time to time. As if that were not enough, major seasonal fluctuations in rainfall meant that it was extremely difficult to secure a stable supply of water for agriculture. It was perhaps therefore inevitable that sugar cane, given its robust resistance to strong winds and water shortages, would become the basis for industry and the livelihoods of the people.

Daito Seito Co., Ltd., established on Minami Daito in 1950 is the island's only sugar manufacturing company.

Changes in sugar cane harvesting methods on Minami Daito

1910-1980s

Harvesting using a light railway



- High cost of maintaining engine and tracks
(Although the island has a circumference of 21km, the railway had a total length of 27km)
- Difficulty in loading/unloading

1980s onwards

Harvesting using a harvester vehicle and trucks



▲ People interviewed for this feature (from left): Kiyohide Okiyama (JA Okinawa), Chikatoshi Okiyama, Kazunobu Aragaki, Shoichi Kumada (Daito Seito Co., Ltd.)

For the islanders, sugar cane is the only industry that protects their continued livelihood; if it were to disappear then the island itself would lose its value as a place for habitation. Protecting the sugar cane industry is therefore essential for keeping the island functioning as a home for its people and also, in a sense, for maintaining a presence for Japan on the island.

Contributing to Improving Sugar Cane Productivity

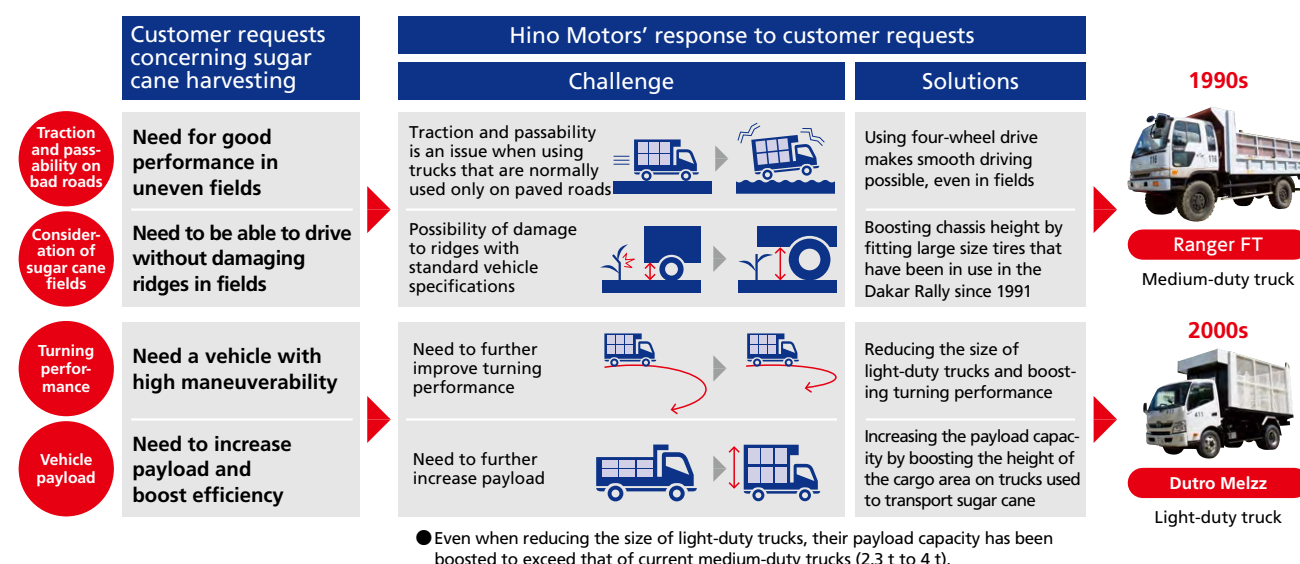
It is necessary to ensure sustainability in order to further develop the sugar cane industry on Minami Daito, and for this to be achieved, the critical point is to improve productivity. For the islanders the perennial challenge is to realize greater efficiency in harvesting and transportation. For many years a light railway known as the “sugar train” was used to transport sugar cane on the island. However, growing maintenance costs for the railway engine and tracks meant that the islanders gradually shifted to using trucks; the railway was completely dismantled in 1983. Currently the method considered to be the most efficient is to have trucks run alongside a large harvester to collect and transport the sugar cane.

In 1998, the Hino Motors sales company Okinawa Hino Motors, Ltd., submitted a proposal to provide a specially customized “Ranger FT”* truck for harvesting to Daito Seito, which was searching for a more efficient way to transport sugar cane. The company purchased 31 of these FT Trucks. At the time this was a completely new venture for Okinawa Hino Motors, but the order was successfully won by listening carefully to the concerns of both Daito Seito and the local farmers.

Harvesting sugar cane presents a variety of unique challenges: (1) the need to ensure that tire width matches the ridges in the field, as trucks need to directly enter the field to run alongside the harvester; (2) the importance of boosting the height of the chassis so that it does not damage ridges in the field; (3) ensuring that trucks can easily run at the same speed as the harvester; and (4) ensuring consistent traction and passability on uneven surfaces. Okinawa Hino Motors has worked consistently with the people of Minami Daito to resolve each of these and other challenges.

The original trucks that were purchased by Daito Seito are still in use today thanks to careful and attentive maintenance.

Customer Requests and Hino Responses





Delivering Successor Vehicles for the Next Generation

Since around 2006, new challenges related to improving productivity have been the focus. These included measures to reduce the turning circle of trucks in the sugar cane fields and also to boost the payload capacity, so that each truck could carry more sugar cane.

Okinawa Hino Motors focused on the challenge of improving sugar cane harvesting efficiency, identifying the customer's needs and worked in cooperation with Daito Seito and JA Okinawa through a two-year process of repeatedly testing new prototype vehicles and submitting proposals. In 2016, it was decided that Hino Motors trucks would be selected as the next-generation vehicles to add to the original fleet. Although the new vehicle does not have all the performance attributes of the FT trucks, through a process of customizing the standard specifications of the light-duty truck Dutro Melzz, it has been possible to boost transport efficiency by approximately 30%, which is what led to the decision to



▲ The immaculately maintained Dutro Melzz trucks of Daito Seito Co., Ltd.

adopt it as an appropriate next-generation vehicle.

The sight of Hino trucks being loaded with golden sugar cane and moving it to the sugar processing plant is a part and parcel of the daily scenery on Minami Daito from winter through spring. Aspiring to deliver on its slogan, "Trucks and Buses That Do More," Hino Motors will continue to contribute to the sustainable development of Minami Daito.

VOICE



Working to Ensure Sugar Remains the Key Industry for Another Century

Tatsuji Okiyama

President and Representative Director
Daito Seito Co., Ltd.

Hino Motors is an indispensable partner for the sugar cane industry on Minami Daito. When we first introduced Hino trucks I was still farming myself, so as someone well-acquainted with local conditions I made various requests. When we requested the replacement of the trucks in 2014, Hino Motors accurately grasped the challenges we face on the ground, with the result that they provided us with excellent trucks that fit the purpose. In recent years the number of young people working in the sugar cane industry on Minami Daito has remained stable, which is excellent news, and helps to maintain the island's vitality. I hope that Hino Motors will continue to support our business long into the future.

Continuing to Provide Trucks That Support Island Life



Right: **Hirosuke Fukuzato**
President and Representative Director
Okinawa Hino Motors, Ltd.

Left: **Shigeo Higa**
Managing Officer, Member of the Board

When Daito Seito was first considering the introduction of trucks to run alongside the sugar cane harvester, I met with Mr. Okiyama, who is now President of Daito Seito, but back then was still involved directly in sugar cane farming. I learned about the various challenges the farmers faced from him. We made various customizations in response to harvesting conditions, creating a vehicle based on our broad knowledge, including technology that was under development for use in the Dakar Rally at the time. We were overjoyed when our efforts paid off and we received the original order, which led to an ongoing relationship with the island. Although new successor trucks have also been introduced since, I am always deeply impressed to see the trucks from the original order still running smoothly, thanks to maintenance that keeps them looking just like new.

* Ranger FT: A four-wheel drive, medium-duty Hino Ranger truck.