

Summary of Mitsubishi Chemical Holdings Products' Contribution Toward
Conservations of Biodiversity

Tokyo Metropolitan University
Professor
Naoki Kachi

The Mitsubishi Chemical Holdings (MCHC) Group aims for the realization of “*KAI TEKI*.” *KAI TEKI* in essence means “a sustainable condition which is comfortable for the people, society’s needs and the Earth, transcending time and generations.” One of the three core management policies of the MCHC Group is “sustainability.” This allows the realization of sustainable development among the people and society.

Natural capital is an essential component of the sustainability axis. Natural capital assets provide various ecosystem services, which are supplied by an inherently sustainable system. The core of this system is “Biodiversity.” There are three levels of Biodiversity, namely genetic, species and ecosystem diversity. Among these, “ecosystem diversity” in particular provides a system that maintains sustainability of nature.

Humans have continuously received great benefit from nature through modifying it over the years. The Japanese “SATOYAMA” concept is a good example. We receive benefits from SATOYAMA while the ecosystem service is maintained. In recent years, the gift of SATOYAMA’s blessing has become less and the ecosystem service is collapsing. SATOYAMA, in its original meaning, can no longer be realized in our daily life.

In our *KAI TEKI* society, we see a need for a new ecosystem where human actively makes use of Biodiversity and receiving the benefits from nature. Ecologists call this new ecosystem a “NOVEL ECOSYSTEM,” and they have begun to study its characteristics and feasibility.

An overall picture of MCHC Groups products and their contribution to Biodiversity shows that many of the products can be categorized as preserving “Ecosystem Diversity.” One example is “GOBIMAT™,” a concrete block mat for river bank erosion protection. I personally am looking forward to the realization of this new “NOVEL ECOSYSTEM,” the alternative to SATOYAMA, through corporate activities of the MCHC Group Companies.

Overall Picture of MCHC Groups' Products and Their Contribution to Suppression of Biodiversity Loss

		Contributing Area						
		Ocean	Rivers, Lakes & Marshes	Flatlands	Cities	Rural, SATOYAMA	Mountain Forest	Total
Drivers of Biodiversity Loss	Habitat Loss and Degradation	1	4			1	4	
	Overexploitation and Unsustainable Harvestation					2	1	
	Pollution from Excess Nutrients	2	3					
	Invasive Alien Species						1	
	Climate Changes							2
Levels of Biodiversity	Ecosystem Diversity	2	5				3	2
	Species Diversity	1	4			2	2	
	Genetic Diversity					1		

※Number of MCHC Group products by contributing area, levels and drivers.

