## Benefit of Giant Panda Conservation Far Exceeds Cost, Experts Say

he giant panda is a flagship species of wildlife conservation, and its black and white pelage and cute appearance attract people all over the world.

Starting from many years ago, the Chinese government has been investing large amounts of money in panda conservation to save this endangered species from extinction. A total of 67 nature reserves have been established and played a key role in the effective conservation of these lovely and precious animals. The 4<sup>th</sup> National Survey of Giant Pandas revealed that both their population and habitat area had significantly improved compared to the result of the 3<sup>rd</sup> National Survey. And in 2016, the International Union for Conservation of Nature (IUCN) downlisted the status of the giant panda from "endangered" to "vulnerable."

However, many people in China have questioned the government investment and asked if investing so big in preserving the giant panda is worthwhile at all. Some detractors even argued that putting valuable resources on pandas is totally wasteful.

To determine the value of panda conservation and answer these doubts, a research team led by WEI Fuwen from the Institute of Zoology, Chinese Academy of Sciences worked with colleagues from other research organizations in China to assess the value of ecosystem services from giant panda reserves, which was the first time in history.

The researchers performed a meta-analysis of ecosystem service studies implemented in China and calculated a unit value per hectare per year for each subcategory of ecosystem services. They measured the benefits humans derive from the conservation ecosystem, including provisioning (e.g. food and water), regulation (e.g. flood or disease control), and culture (e.g. recreation, natural beauty, etc.). The researchers found that the value provided by the giant pandas and



forested habitat within nature reserves is worth between 2.6 and 6.9 billion US dollars every year, 10-27 times the conservation cost of giant pandas.

This finding answered the long-standing public concerns over the costs versus benefits of giant panda conservation, helped clear misunderstandings about those efforts, and has important implications for giant panda conservation, expansion of the nature reserve network such as the Giant Panda National Park, and other investments in natural capital in the future.

Their study, entitled "The Value of Ecosystem Services from Giant Panda Reserves," has been published in *Current Biology*. Their work was supported by the Ministry of Science and Technology of China, the National Natural Science Foundation of China and the Chinese Academy of Sciences. (Text by WEI Fuwen's group)