

M1 Background information “Sushi”

Sushi in its original form comes from south-east Asia and was known as narezushi. It was salted fish wrapped in fermented rice and stored for several months. The fermented rice stopped the fish from going bad. Only the fish was eaten; the rice was thrown away. The word sushi is an old grammatical form which has fallen out of use in other contexts and literally means ‘sour’, a reference to the food’s fermented origin. Today’s sushi has little in common with the way it was prepared originally.

The sushi made and eaten today consists of rice, raw fish, seaweed and vegetables. It has become popular throughout Europe and there are sushi restaurants in almost every town and city. But how eco-friendly is the sushi we enjoy so much, and how fairly is it produced? This activity will focus on one of the main ingredients of sushi: fish (such as salmon or tuna). This background information also contains a brief overview about rice and on the certification of fish.

Rice

Rice is the basic staple in the diet of almost half the world’s population. Rice has been cultivated for around 10,000 years. Today, around 144 million rice farms grow this crop, most of them on an area of less than one hectare. There are about 40,000 varieties of rice in the world, with differences in shape, colour and nutritional content. Although rice production is one of the world’s most important industries, only 7 % of the world’s rice yield is exported from its countries of origin.

Predictions of population growth issued by the United Nations and projections on income development drawn up by the Food and Agricultural Policy Research Institute (FAPRI) estimate that global demand for rice will increase from 439 million tons (white rice) in 2010 to 496 million tons in 2020 and 555 million tons in 2035. In order to cope with this rising demand, scientists have developed various high-yield varieties of rice to provide higher yields per hectare and enable several harvests each year. However, these developments present new challenges, such as the greater toll they take on the ecosystem and shorter recovery cycles for the soil, the loss of original varieties, changes in nutritional content, and new structures of seed ownership which may mean farmers have to pay licence fees for seed to big corporations.

Fish

Sushi can be prepared using various different types of fish. The ones we are most familiar with are salmon and tuna. The activities in this unit revolve around fish in general and take a look at the challenges associated with the fish industry. Millions of families across the globe depend on fishing for their livelihoods. However, increasing demand for fish and industrial fishing methods now pose a threat to marine flora and fauna and to those working in fishing. Every year, 93 million tons of fish and seafood are caught in the world’s seas and oceans. On average, each of us consumes 14 kg of fish and seafood per year, and for around 2 billion people these foods make up the main part of their daily diet. Population growth is pushing up demand for fish and seafood.

So they can make bigger catches, the trawlers (fishing boats using nets called trawls which are dragged through the water) used by commercial fishing operations are getting larger and larger, as are the nets themselves. The nets literally plough the sea bed in order to increase catch; this destroys the vegetation and the sea life which support and sustain marine ecosystems. Another effect of modern industrial fishing methods is that young fish are caught before they have had an opportunity to reproduce, which means that fish populations cannot replenish themselves. Large amounts of by catch make the problem worse. The increasing overfishing of the world’s seas means that making a living is ever more challenging for small-scale fishers, many of whom are at risk of poverty.

Fewer and fewer fish are caught in the wild these days; fish farms, an industry also known as aquaculture, meet consumer demand for fresh fish. Pollution-free and environmentally responsible fish farms do not pose a problem for marine life, but most fish farms use chemicals and antibiotics which contribute to polluting oceans and seas.

Certification

The best-known certifications for sustainable fisheries are the MSC label for wild fish and the ASC label for aquaculture produce. These are internationally recognised certification systems. Products meeting these certification criteria have been available in supermarkets for many years. These types of certification and labelling programmes monitor the way in

which products are produced and issue strict criteria to protect the health and continued existence of fish stocks and entire ecosystems. Other relevant principles include minimising impact on the environment, responsible and efficient management of fisheries, only fishing in permitted waters, and adherence to regulations on fish feed and hygiene.



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