

Taichung City Government has introduced an initiative to help all local schools adopt a “one day per week vegetarian school lunch policy”. The policy makes use of sustainable public procurement to increase the uptake of locally-sourced, vegetarian food products across the school district, which is one of the largest public bodies in the city.

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Introduction

In light of the fact that the ecological footprint of a vegetarian is lower than that of a non-vegetarian, Taichung City enacted a policy which guarantees "One Vegetarian Day a Week in Schools" and encourages the procurement of locally produced food. The policy, which was launched in 2012, was introduced not only to lower the local carbon footprint, but also to provide economic support to local food producers and form the basis of a public awareness campaign on incorporating sustainable behaviors and eating habits into day-to-day life.

Reduced-meat or fully vegetarian diets are recognized as a way to reduce the environmental impacts of many aspects of meat production, such as farming, procurement, transport and storage. According to the Environmental Protection Authority (EPA) in Chinese Taipei, a single meal without meat can reduce up to 0.78kg of CO₂ emissions. It is more energy and resource efficient to produce vegetables than it is to produce meat, and the global supply of farmland, water and fossil fuels required to produce food is limited.

The act of procurement comprises a significant amount of public expenditure: an estimate made by the United Nations Office for Project Services (UNOPS) projects that an average of 15 per cent of global gross domestic product (GDP), over \$10 trillion USD, is spent through public procurement systems annually. Introducing sustainable criteria into the public procurement process can ensure that the products and services purchased can help to create environmental, societal and economic benefits.

Taichung City in context

Located in central Chinese Taipei, Taichung is the third most populous city on the island. In 2010, Taichung City Government established the Low Carbon City Promotion Committee in order to promote various low carbon city policies and carbon reduction projects by all the relevant authorities and departments within the City.

The City published a Low Carbon City White Paper in 2011, which sets climate change mitigation measures for every bureau of the city government. These measures include the importance of developing a low carbon food system in Taichung City. Even prior to the publication of the White Paper, food security, food safety and low carbon development issues were points of public discussion on the island.



Facts & Figures

Population (2017)

2,781,000

Land area (2017)

2,215 km²

Taichung City has been a
Member of ICLEI since 2011

Description of activities

An innovative urban agriculture initiative

Since the policy was introduced in 2012, 307 Taichung City Government and local schools - representing 100 per cent of schools in the city - have implemented the “One Vegetarian Day a Week in Schools Policy” using locally-sourced food products. Food products containing genetically modified organisms (GMO) are excluded from procurement within the program. There are four-types of procurement practiced for school catering in Tainan City: self-catering, outsourcing, group procurement, and inter-school cooperation. By September 2016, all schools must be compliant with the program.

Of the 307 schools, 115 prepare their meals on-site in school kitchens; this has enabled them to go beyond the minimum limit of the project and provide two vegetarian days each week. All ingredients are provided from local farmers and factories, resulting in fewer food miles, reduced carbon emissions and the development of local business.

To complement the policy, the City employs 50 professional nutritionists to carry out consultations and informative workshops with each school being visited four times per year. Together with school leadership and independent auditors, the nutritionists audit the school lunch program every third year to ensure it is being properly implemented.

Taichung City has also supported the use of workshops to help improve the capacity of the food and catering providers. For the purpose of improving hygiene and nutrition awareness, a series of 32-hour workshop programs are provided to hygiene inspectors during the summer and winter vacation every year, as well as an 8-hour lecture course for all kitchen workers.



Image 1: Students excited for a vegetarian lunch

Source: Taichung City Government

Results

Making progress in emissions reduction

307 schools have fully implemented the one day per week vegetarian school lunch program, meaning that there are presently more than 274,500 employees and students eating a minimum of one vegetarian meal every week. Based against the emissions data provided by the EPA - that each meal without meat can reduce carbon dioxide emissions by 0.78 kg - the Taichung City vegetarian lunch initiative therefore has the potential to prevent approximately 8,568 tons of carbon dioxide emissions each year. In addition, the 115 schools that carry out self-catering and inter-school cooperation lunch programs can reduce carbon dioxide emissions further by cutting food mileage through contracts with local farmer associations to supply vegetables twice per week.

The success of the initiative has encouraged the City to plan new and related programs. In September 2015, the City started testing a 'My Farm Garden' program to encourage schools to turn vacant land into agricultural farm land. Students can experience farming and growing their own foods and, in turn, gain an understanding of local food products and the concept of food mileage through real local food production and commerce.



Images 2 & 3: It isn't just about eating; students learn to prepare high quality vegetarian meals

Source: Taichung City Government

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Lessons learned for replication

In the course of successfully introducing the one vegetarian meal a day initiative, staff at Taichung City have identified a number of lessons learned which could help another municipality introduce a similar project.

- **Start slow:** the Bureau of Education began encouraging every school to promote a voluntary one day per week vegetarian school lunch policy in 2010, before turning the initiative into a mandatory program to be fulfilled by all 307 schools in the area by 2016. The program has also inspired the emergence of related initiatives, such as 'My Farm Garden'.
- **Raise awareness:** the consultation program provided by the 50 school nutritionists has not only enhanced the awareness of students on issues such as hygiene, food safety and nutrition, but has also expanded the concept of low carbon meals gradually to each school student.
- **Be patient with changing dietary habits:** another reason that awareness raising is important is that a major barrier in successfully implementing the project was changing the eating habits of all the students. In combination with the awareness raising campaigns, this barrier was solved by gradually adjusting the lunch menu to increase the variety of food selection and to reduce the prominence of processed food. To further increase the likelihood of students accepting the dietary changes, catering staff have tried to provide students with their favorite (non-meat) meals on the vegetarian food day in order to increase the popularity of the initiative.

Costs and financing

In Taichung City, the fee for school lunches comes is paid by the families of each student. While the rate may differ at each school, the average fee is about 38 to 45 TWD per meal (ca. \$1.40-\$1.50 USD), which pays for the full cost of the lunch (ingredients, procurement and staff/operational costs).

Beginning in September 2015, Taichung City has subsidized 5 TWD per vegetarian meal for both students and staff in order to facilitate the target of local production and procurement. The annual budget for these subsidies is estimated to be 113.5 million TWD (approximately \$3.4 million USD).

References and further reading

- Harvey, F., 2016. Eat less meat to avoid dangerous global warming.
- ICLEI, 2017. CITYFOOD Network.
- Taichung City Government, 2014. Environmental Protection Bureau.
- Taichung City Government, 2012. Have you taken vegetarian diet today?

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