



Association pour la santé environnementale du Québec
Environmental Health Association of Québec

ECO-JOURNAL

June 2021

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The Environmental Benefits of Organic Urban Agriculture

What is urban agriculture?

Urban agriculture is the farming, the production and the cultivation of land where food grows in an urban setting (Okvat, 2011). Within urban agriculture, urban gardens, rooftop gardens and community gardens are included. Interestingly, over half of the world's population live in urban areas (Orsini, 2014), indicating that many people either have access to urban gardens or have the possibility of creating green urban settings. Specifically, organic produce is grown without the use of synthetic pesticides or fertilizers but rather using natural found pesticides such as plant derived compounds.

Brief history

Urban agriculture emerged during the World Wars out of necessity. This form of agriculture helped refurbish land as well as practice frugality and self-sufficiency during times of severe drought and economic despair (Hornbeck, 2009). In current times, we see the benefits urban agriculture provides for society by bringing communities together and creating a greater sense of social cohesion amongst people, because gardeners form interpersonal relationships and offer mutual help between each other. In addition to these societal benefits, urban agriculture decreases the environmental impact by reducing transportation and creating cleaner air.

Transport and air pollutants

In North America, most foods are transported across large distances. These distances can be determined through 'food miles,' which is defined as the distance food is transported from the time of its production until it reaches the consumer (Kissinger, 2012). Indeed, a study found that overall, food traveled over "61 billion tonnes km and generated about 3.3 million tonnes of CO₂" in Canada



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greatly due to modes of transportation and imports (Kissinger, 2012). Evidently, transportation is a great source of air pollutants in urban areas (Janhäll, 2015). This is problematic because transport modes such as cars, trains and ships emit harmful pollutants like volatile organic compounds (VOCs) and CO₂. VOCs and CO₂ are air pollutants that have been found to cause adverse human health effects such as respiratory diseases (Kampa, 2008).

How Urban Agriculture Helps

Producing locally would remove the necessity of transporting food across long distances by high pollutant emitters. Food grown locally through urban agriculture can be picked up by foot or by bike. Even by car, food miles are significantly lower as the distance from point of production to point of consumption is reduced. Plus, urban agriculture farms often have a pick-up point where the groceries are delivered to which is walkable from the individual's home. This encourages individuals to use active modes of transport and not travel far distances. Evidently, reducing transportation by producing locally through urban agriculture is an effective way in reducing air pollutants.

Moreover, a study found that vegetation can improve air quality by filtering out and diluting the air pollutants (Janhäll, 2015). Thus, increasing vegetation in urban areas through urban agriculture increases air quality by naturally creating cleaner air.

In conclusion, transport is a great emitter of air pollutants and can be reduced through urban agriculture. This sustainable practice offers societal and environmental benefits and should be encouraged in urban areas.

Getting Involved

Getting involved and informed about urban agriculture is a great way individuals can mitigate against environmentally induced illnesses, including environmental sensitivities. Check out local community gardens that you can participate in or local urban agriculture and rooftop gardens from which you can order from and support!



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