

Trees in the city



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They are worth much more than they cost and they must be managed by arborists

Trees are the main assets of our cities. This statement may seem obvious but, while operating costs of planting and maintaining trees are widely known, the benefits they provide are often little known and underestimated.

In recent years the number of trees in many cities has decreased (although there are some exceptions), especially with the loss of open spaces in private properties. In a climate change scenario, it is worrying that the public and private open spaces are threatened by the "urban renewal" and by the development that jeopardize the long-term sustainability. In many of these

situations there is not sufficient space (both for crown expansion and, above all, for the development of an adequate root system) for planting of large trees and so the opportunity to maximize the role of the vegetation in improving the heat island effect, store the CO₂, reduce the concentration of pollutants (especially PM_x), reduce the speed of the wind, protecting buildings and, consequently, reduce the consumption of energy, are significantly reduced. Beyond this, also climate regulation, management of heavy rains, water purification and increase biodiversity will be penalized.

Therefore we must ask to ourselves not only about the economic feasibility of these development policies (but is this a “true development”?) but also on their long-term environmental sustainability. Actually, trees provide a number of economic and ecological services for society. These are now called ecosystem services and they justify the investment of resources such as labor, energy and water. Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth. They directly or indirectly allow our survival and quality of life (<http://www.ecosystems-services.org.uk/ecoserv.htm>).

Unlike the economic and human capital, natural capital has no dedicated systems of measurement, monitoring and reporting. This is surprising given its importance, not only for the "classic" ecosystem services mentioned above, but also for the possibility of creating jobs and contributing to the future economic development. In saying this we have only scratched the surface of what trees can offer.

A good governance and a good policy of decision-making which affect people and

involve the use of public funds must therefore be objective, balanced and transparent. The access to the right information at the right time is crucial for a trade-off coherent policy, a situation involving a choice between two or more possibilities, where the loss of value (in this case an expense) of one possibility is an increase in value in another. A better understanding and quantitative measurement of ecosystem services is needed to support integrated policy assessments that are a key part of the long-term solution.

Information on this subject has increased significantly in recent years, as well as the interest towards it and our decision-makers now have the opportunity to explain to the citizens that the resources used for planting trees are therefore not a cost, but they are an investment that generates common profit, because trees and green spaces provide an income (also measurable using the models even available open-source), which is well above the cost required for their planting and maintenance (the cost benefit ratio ranges from 1.3 to 1.9 on worldwide, but some models show benefits up to 3.07, so that for each euro invested in the green, the annual return rate ranges from 1.3 to 3.07 euros). So, in any calculation, full and fair, the trees in the city are worth much more than what they cost.

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It's a real shame that most of the citizens and politicians think that our parks, gardens, urban landscapes and cityscapes only in terms of aesthetics, or even worse, only in terms of cost and problems. Although there are no doubts about the ornamental value and are known potential drawbacks, this should not mask the many, and certainly much more important, functions they serve in our cities.

So if the trees have value, they are an investment. If they allow our very existence on this planet, if they make life more pleasant, if they beautify our properties, our cities, and our landscapes, why would we entrust their care and management to nonprofessional people who view the tree only as a source of income rather than a living being and a silent spirit that gives us life? If you ponder on this, would you entrust a tree to someone who may shorten its life, who reduces the benefits it provides – someone who not only makes you pay directly, but who damages the tree forever, reducing its aesthetic and environmental value as well as the value of your property? If the answer is no, then only appoint highly-qualified professionals to work on your trees, people who work “with” and “for” the trees. this must never be forgotten.

At the same time, we must not forget that trees are mortal beings and, like the rest of the animals and plants on our planet, have a life expectancy that differs from species to species. Their life expectancy can be very long, but in a hostile environment and with wrong management it can be greatly shortened. As trees begin to mature, a real arborist, an certified professional, can see branches that begin to weaken and can advise how to intervene with selective pruning to remove weak branches that could fall and cause injury. This arborist will give you the best tips to extend the life of your tree(s). And if you receive a recommendation, however reluctantly, that a tree should be cut down, this will reduce the risk you may run if the tree were to fall or be uprooted.

In its place we can plant a new tree, choosing it properly, with high growth potential – the “right tree in the right place”. Even in the choice of which tree to plant, rely on “true tree professionals” who will suggest the best species to be planted and a nursery where high quality trees are produced.



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