

Native Plant Connections

Etienne Sirois (sirois2@illinois.edu)

Key SDGs: 11, 13, 15

The Challenge:

Native plants have survived in their natural habitats for thousands of years and are well-adapted to survive without human intervention. They have the potential to be a cost-effective and ecological choice for homeowners and businesses looking for sustainable landscape options. However, there are substantial challenges to widespread use of native plants in landscape design.

There are currently three main challenges to increased incorporation of native plants in landscape design:

- 1. Awareness of Advantages**
Many are still not aware of the advantages of planting native. Popular landscape design currently focuses on grass lawns and non-native plants that require heavy use of water, fertilizers, and labor to maintain.
- 2. Availability of Native Plants**
There is lack of availability of native plants at even the most specialized garden centers. Native plants that are currently offered are not optimized to fit into the manicured landscape styles that are so popular today.
- 3. Native Plant Maintenance**
People do not want plants that will take over entire gardens. Native plants, comfortable in their own habitat, may have a tendency for overgrowth. This presents a concern for those wanting low maintenance landscaping.

11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



15 LIFE ON LAND



Solution:

Designed with specific consideration for the United States

The solution I present is the sale of native plants, packaged for specific geographical regions and property sizes. This solution would connect residential and commercial landscape designers to optimized and specifically cultivated plants native to their regions.

This solution focuses on the sale of plants, rather than seeds. Although native plant seed packs are currently available online, live plant packs would offer more advantages toward meeting the goal of increased use of native plants in landscape design.

This proposed solution would address the current challenges of lack of awareness of the benefits of planting native plants, lack of availability of native plants for purchase, and address native plant maintenance challenges.

Customers can learn about plants native to their area and spread the word to neighbors about the benefits. Landscapers will be encouraged to include native plants in their designs. Ecological learning will be sparked as people contribute to sustainability and are rewarded with tangible and rewarding results.

Native plant farmers will benefit from increased sales, as customer satisfaction increases with low-cost and personalized plant options. Landscapes can be more easily maintained. Native animal populations will return as their habitats are restored.



Top image: *Verbena hastata*

Middle image: *Andropogon gerardii*

Both plants are native to Illinois and would be featured in an Illinois/Midwestern Assortment.

Bottom image: Assortment of plants like the proposed solution, but with native plants.

SDG 11: Sustainable Cities and Communities



Gardens of native plants require less energy and less water usage to keep plants healthy.

Since these native plants are so well adapted to their regions, the plants will maintain themselves and regulate the area where they are planted.

Developing this solution with upfront investment will create a sustainable process for plant production in the future.

SDG 13: Climate Action



Native plants can be grown and produced in their destination locations, meaning less transport, and therefore fewer emissions, are required.

In addition, since native plants are already well-adapted to their environments, they can adapt to rising temperatures and drought more easily.

SDG 15: Life on Land



Native plants have many different varieties, and by increasing their prevalence, we can also promote biodiversity, especially in areas that are lacking sufficient plant life.

In more urbanized areas, native plants will fare better and allow for people to enjoy nature without having to travel long distances.

Implementation:

Left Image:
Indoor plant production
Right Image:
Outdoor Plant Production
Both facilities could provide space for native plants.



A simple transition using existing resources and processes.

Implementation:

Using existing growers and greenhouses, transition some of the resources and facilities currently used by production of other plants to growing native ones that are exported to specific locations.

As plant production is a highly developed and specialized with lots of specific technologies, transition would be smooth with the many required systems already in place.

Customization of plants:

- Low to high maintenance
- Flowering or leafy
- Seedlings or fully mature
- Small or bulk packs

By tailoring products to each customer, we can make the product more appealing.

Progression and Assistance:

This is a solution that could be handled fully within the private sector. Native Plant Connections would act as liaison organization connecting all three parts of the equation (customers, products, and installation) and handling payments and contracts.

Although partnership with the government through subsidization for growing native plants would be helpful to advancing the goal, it is not necessary. The only main obstacle for implementation is ensuring we have the interest of plant producing companies to increase production of native plants.

Required Resources:

Water for plants

Electricity for growth lighting

Employees to maintain and supervise the process

Technology design and infrastructure to connect the native plants to customers

Initial investment and funding to encourage plant growers to dedicate a section of production to native plants

Program success:

As this program has an environmental solutions focus and is, therefore, extremely large-scale, it is difficult to set specific parameters that can be measured. However, one solution for measuring the potential for success, would be to first try the project on a small-scale within a neighborhood, for example. Marketing and offering the native plants to a specific area and then checking back on how many people took advantage of the offering would give an idea of potential for program success on a larger scale.

Special thanks to Commissioner Kimberly Worthington, City of Chicago Department of Environmental, Health, and Safety Management, Deputy Commissioner; worthington2501@gmail.com

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