

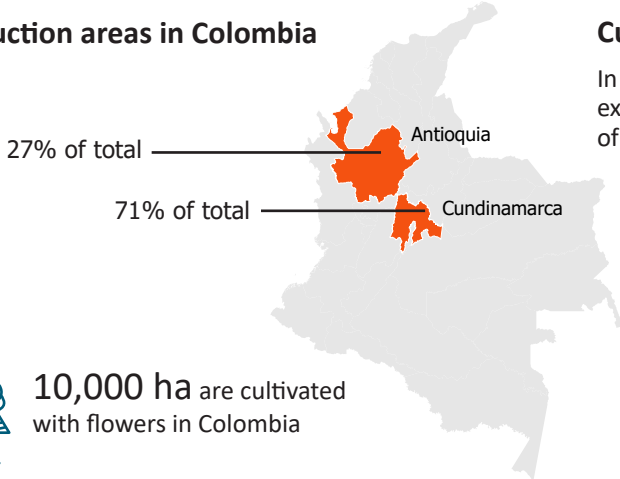
RESILIENCE

THE USE OF PLASTICS IN THE FLORICULTURE SECTOR IN COLOMBIA

July 2024

FLORICULTURE IN COLOMBIA

Production areas in Colombia



10,000 ha are cultivated with flowers in Colombia



6.6% of agricultural GDP is from floriculture



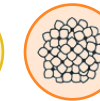
200,000 direct and indirect jobs with women heads of household accounting for 60% of the direct employment

Cut flower types exported to the Netherlands

In 2023, the flower sector reported sales of 2,080 million USD.* Of these, exports to the Netherlands amounted to 54.7 million USD, the equivalent of 11,633 tons.



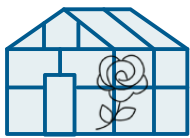
- 46.3% Carnations
- 14.2% Mini carnations
- 14.5% Roses
- 8.5% Alstroemerias
- 7.1% Hydrangeas
- 9.4% Pompons and chrysanthemums



*Under HS code 0603 – Cut flowers and flower buds of a kind suitable for bundles or for ornamental purposes.

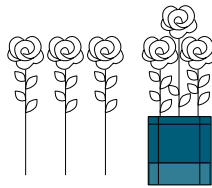
PLASTIC MATERIAL USED

Plastics used during **harvest and post-harvest** handling are durable and often participate in a closed-loop system where they are recovered, reused, or recycled after their useful life. Plastics used in the **packaging** area are typically single-use plastics, generating a significant amount of waste.



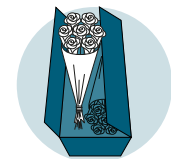
Production phase

- Greenhouse plastic
- Containers of agrochemicals
- Irrigation hoses
- Protection nets



Harvest and post-harvest phase

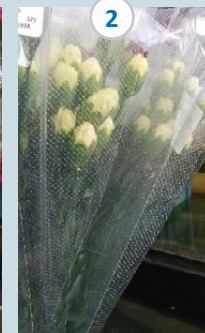
- Plastic boxes
- Plastic cones
- Plastic crates



Packaging and export phase

- Rubber bands
- Plastic strapping bands
- Sleeves

Common materials used for protective sleeves and films include polypropylene (1), perforated polypropylene (2), polyethylene (3), paper (newspaper type) (4), kraft paper (5), corrugated cardboard (6).

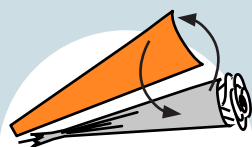


CHALLENGES IN IMPLEMENTING ACTIONS TO REDUCE OR REPLACE PLASTIC MATERIALS



LIMITED VALID ALTERNATIVES TO PLASTIC

Alternative to traditional sleeves must offer good protection during shipping, good appearance, sufficient supply and equivalent or reasonable price.



REPACKING PROCESS

Depending on the client and the market for the flowers, bundles are sometimes repacked after being imported, resulting in a double use of plastic material for each bundle.



RESISTANCE TO CHANGE

Keeping up with evolving consumer preferences, market trends and legal requirements to protect the environment can take time.



DIFFICULT QUANTIFICATION

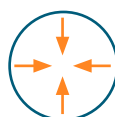
Exporting companies do not seem to keep record of how much plastic is shipped together with their products, and their interest in engaging in such measurements is limited.



WEAK COMMUNICATION CHANNELS AND AWARENESS

The sector could benefit from a further improved communication between trade associations and their members.

RECOMMENDATIONS TO REDUCE PLASTIC USE IN THE SECTOR



Reduce the size of the plastic sleeves as much as possible.



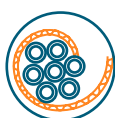
Use plastic sleeves with lower density.



Promote the use of opaque sleeves.



Use materials that are made from 100% recycled material and that are fully recyclable after use.



When delicate flowers need corrugated board paper, arrange them in circular shape to use less material.



Explore the possibility of using natural fibres to tie bundles.

TO REACH THE GOAL, COLLABORATION IS NEEDED:

- **Plastic material suppliers and export companies:** to ensure that alternatives packaging solutions with different size, density and materials do not affect flower quality.
- **Export companies and clients:** to evaluate, promote and push packaging with different colors, shapes and sizes to the final customers.

The reduction and substitution of plastic in Colombian floriculture is a **complex but necessary challenge**, driven by regulations and the demand for sustainability. A comprehensive approach that combines reducing plastic use, transitioning to alternative materials, and implementing circular economy practices **to ensure a lasting positive impact** on the environment and the sector's economy are required for this challenge to be overcome.

