



IMPACT SUMMARY FOR MONARCA FOOD SOLUTIONS

LOCATION: FRANCISCO SERRATO, ZITÁCUARO, MICHOACÁN

Total land area: 1,831 hectares

ZONING AND PROTECTION STATUS WITHIN THE MONARCH BUTTERFLY BIOSPHERE RESERVE – FRANCISCO SERRATO

- **Core Zone:** 595 hectares (strictly protected critical habitat)
- **Buffer Zone:** 240 hectares (regulated area supporting conservation efforts)
- **Area of Influence:** 996 hectares (surrounding lands impacting ecological integrity)

SOCIAL CONTEXT OF THE INDIGENOUS COMMUNITY: FRANCISCO SERRATO

Community Profile (INEGI, 2020):

- Total population: 1,850
- Indigenous Mazahua speakers: 909
- Women: 944 (51%)
- Men: 906 (49%)

DIRECT SOCIAL IMPACT OF THE PROJECT:

The project has engaged 250 landowners (30% women and 70% men) and trained 170 people in forest restoration and spring recovery, including 50 women and 120 men.



IMPACT ON MONARCH BUTTERFLY MIGRATION CONSERVATION

Restoration of critical habitat: The reforestation and restoration of 5,000 native trees in Francisco Serrato contributes to the recovery of essential overwintering habitats for monarch butterflies, helping to safeguard the sites where this natural phenomenon occurs.

Community-led conservation: The project strengthens the role of local people—especially indigenous Mazahua women and men—as stewards of their territory, ensuring that conservation efforts are rooted in community knowledge, ownership, and long-term commitment.



Ecological connectivity: By restoring degraded areas within the Monarch Butterfly Biosphere Reserve, the project enhances forest continuity, creating corridors that allow monarchs to find refuge, shelter, and stable microclimates during their overwintering period.

POTENTIAL WATER RETENTION IMPACT:

The following data were developed in partnership with the organization Cultivo, based on Alternare's technical data and the estimated water retention potential of temperate forests in Mexico—specifically under ecological conditions similar to those of the Monarch region—with an average retention of 450 m³ of water per hectare annually.

- **In the 5 hectares restored through the adoption of 5,000 trees by Monarca Food Solutions:**
Approximately 2,250 m³ of water retained annually.
- **Projected impact across the entire Core Zone (595 hectares) of Francisco Serrato:**
Up to 267,750 m³ of water could be retained per year.