

2020

A Sustainable Mobility Solution for Persons Living with Disability in Burkina Faso

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Our Mission: The Sustainable Mobility Project empowers people living with disabilities in Burkina Faso allowing them to fully participate in family and community life. Disabilities often restrict people from moving independently or pursuing an education or job. Our team seeks to show more people Christ's love by helping them move independently. The Collaboratory 3-wheeled off-road wheelchair does this by providing mobility that reduces the stigma surrounding disability. We hope that through this project people will more readily establish their identities in Christ, not their disability.

Partners & Trip

Our Partners

SIM

- International Christian organization.
- Emphasis on spiritual and physical needs.
- Two disability centers in Burkina Faso.

Françoise Pedeau

- Served in Burkina Faso for 34 years.
- Partnered with Sustainable Mobility since 1999.
- Working remotely from France.



Site Team Trip

- Built relationships with our partners.
- Equipped our partners with the parts and training to establish a new fabrication site in Fada, Burkina Faso.
- Implemented new fixtures and jigs.



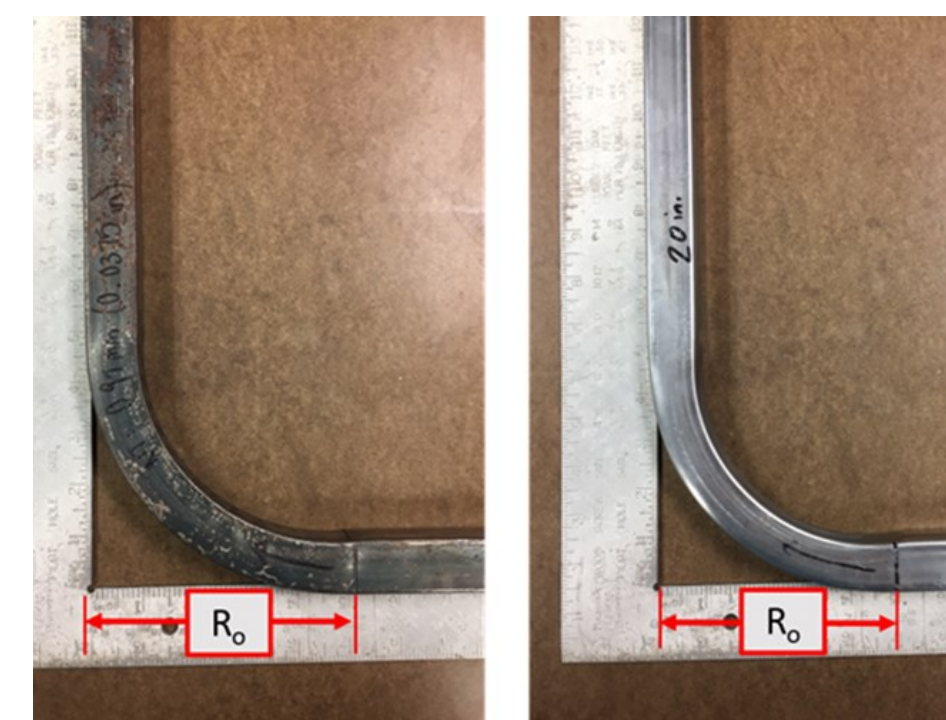
- Tested documentation clarity.
- Discovered discrepancies in tube bending.



Recent Work

Frame Variable Bending

- Noticed final frame dimension discrepancies on site team trip
- Discovered that varying material and tube bending machine produced varying bend radii (pictured below).
- Created a solution, consisting of a test bend and tabulated dimensions, to help determine bend locations.



Documentation

- Used information from the site team trip to edit documents to better suit our partners.
- Worked with French sub-team of Sustainable Mobility to translate documents into French, the language of our partners in West Africa.



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Next Steps

System Integration

After identifying the need for a system integration document on the 2020 trip, the team plans to:

- Build latest trike design.
- Integrate subsystems.
- Draft integration document.



Future Business Model

To create a turnkey business model for Sustainable Mobility, the team plans to:

- Research manufacturing and supply chain partners.
- Get quotes for needed trike parts.
- Finalize detailed Bill of Materials for the trike.

