



FIG position paper from FIG Task Force on Evolutionary Diversity and Inclusion:

Coordinates of Inclusion in Surveying and Geospatial: Perspectives Across the Profession

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1. Introduction

In surveying and geospatial sciences, the term coordinates define precise positions and relationships in space. But beyond the maps and grids, coordinates of inclusion reflect how well our profession positions people — regardless of gender, culture, or background — within its own professional landscape.

As we advance technologically, the call for social and professional inclusiveness becomes more crucial. Inclusion is not a side conversation — it is a strategic coordinate for sustainability and innovation in surveying and geospatial practice.

2. Understanding the Coordinates of Inclusion

Inclusion in surveying means ensuring that every capable individual finds a place and a voice in the geospatial field. It goes beyond equal access to education or employment; it involves creating an environment where diverse perspectives are valued, integrated, and empowered to contribute meaningfully.

Diversity provides the data points — people of different backgrounds, genders, and cultures.

Equity ensures fair adjustment of our "datum" — so that everyone starts from a level base.

Inclusion connects the coordinates — forming a unified system that reflects the strength of the whole profession.

When these coordinates align, the map of our profession becomes complete and accurate.

3. Systematic Barriers and Social Dynamics in the Profession

Despite progress, several barriers still distort the professional map of inclusion:

3.1. Gender Disparities

Women remain underrepresented in surveying and geospatial science, often due to:

Stereotypical perceptions of surveying as a "male field."

Limited mentorship and professional networking opportunities.

Workplace cultures that undervalue female leadership and technical competence.

3.2. Cultural and Societal Influences

In many cultural settings, traditional expectations limit exposure and encouragement for young people, especially women, to pursue careers in STEM and surveying. This leads to:

Reduced enrollment of women and minorities in surveying schools.

Fewer role models from diverse backgrounds in senior positions.

3.3. Institutional and Policy Constraints

Some organizations lack structured diversity policies or mentorship frameworks.

Recruitment and promotion processes sometimes unconsciously favor certain groups.

Limited visibility of successful professionals from underrepresented backgrounds discourages aspiring entrants.

These barriers form invisible "boundaries" in the coordinate system of our profession — boundaries that must be redefined for growth and equity.

4. The Geospatial Journey of Surv. Stephen Djaba

My journey in surveying and geospatial sciences is one of resilience, mentorship, and continual learning. I started as a young student passionate about maps and measurements — fascinated by how coordinates define the world we live in.

Through commitment and mentorship from senior professionals, I discovered that surveying is not only about data — it's about people and purpose.

Some milestones in my professional journey include:

Working across different regions and projects has exposed me to varied geospatial challenges.

Engaging with professional associations that promote knowledge sharing and innovation.

Mentoring younger surveyors, especially women, to ensure that no capable hand is left behind.

Each opportunity strengthened my belief that inclusion fuels progress. The diversity of teams I worked with often produced the most innovative and practical solutions.

My professional breakthrough came not only from technical competence but also from collaboration, empathy, and inclusive teamwork — qualities that transcend skill and define leadership in our profession.

5. The Importance of Inclusive Representation

Inclusive representation brings measurable benefits to the surveying and geospatial fields:

Innovation: Diverse teams generate richer ideas and creative problem-solving approaches.

Sustainability: Inclusion ensures knowledge continuity as more people see the profession as welcoming and relevant.

Public Trust: A profession that reflects the diversity of the society it serves earns greater credibility and acceptance.

Global Relevance: Geospatial data impacts every community; diversity ensures that the data we produce and interpret respects all perspectives.

In short, inclusion strengthens the ethical and professional coordinates that anchor our discipline.

6. Lessons from Diversity and Inclusion: Sustaining Our Profession

The sustainability of surveying depends not only on technology but also on people and systems. Here are key lessons for young surveyors:

Redefine the profession as people-centered: Surveying is not just technical — it's about serving communities.

Mentorship matters: Every professional must lift another. Inclusiveness begins when experience meets opportunity.

Be open to cross-disciplinary collaboration: Inclusion also means embracing new skills — data science, GIS, AI, and environmental studies.

Promote equitable participation: Encourage female and culturally diverse voices in leadership, academia, and field operations.

Celebrate success stories: Representation inspires. When young people see diverse success stories, they find their own coordinates of possibility.

7. Charting the Path Forward

To truly position inclusion as a coordinate in our professional framework, we must:

Develop inclusive policies in surveying institutions and associations.

Establish mentorship and exchange programs for underrepresented groups.

Foster international cooperation to share inclusive practices.

Use geospatial technology itself to visualize and analyze inequalities — turning our tools into instruments of social awareness.

As young surveyors, you are the new coordinate points defining the next geospatial era. Ensure that your professional map includes everyone — because the accuracy of our world depends on it.

8. Conclusion

The coordinates of inclusion are not fixed points — they are dynamic, evolving with our commitment to fairness, diversity, and innovation.

My journey reminds me that success in surveying is not measured only in meters or degrees, but also in how many others we bring along the path.

Let us align our profession to a new global datum — one defined by inclusion, equity, and shared purpose. In doing so, we sustain not only our profession but also the communities we serve.

Quote to close

"Inclusion is not a favor; it is the coordinate of progress and growth. When every professional finds their rightful place, the map of humanity becomes accurate."

— Surv. Stephen Djaba

