

## University of Arizona & Iskashitaa Community Garden Project

### Collaborators:

PI: Nataliya Apanovich, School of Landscape Architecture and Planning

Community based organization: Iskashitaa Refugee Network

### Bios:

Nataliya Apanovich is a career-track lecturer in the Sustainable Built Environments Program at the UA. She received a Ph.D in Sustainable Agriculture and Biorenewable Resources and Technology from Iowa State University. She teaches introductory courses on sustainability as well as research methods and capstone research project courses. Her research interests focus on food and energy security and the role of the circular economy in achieving sustainable development goals. Nataliya volunteers at the UA community garden weekly with SBE students and their friends.

Garrett Smith, PhD, is a lecturer and the interim chair of the Sustainable Built Environments program at the University of Arizona. Garrett teaches courses related to public lands management, Geospatial Information Systems (GIS) , and sustainable cities. Garrett has extensive experience conducting social-science based research and is fluent in both quantitative and qualitative methods and data analysis techniques. Garrett also works with SBE students and their friends at the UA community garden.

Barbara Eiswerth is an executive director at Iskashitaa. A resident of Tucson since 1992, she worked as a research geologist specializing in GeoSpatial Information Technologies with the U.S. Geological Survey. After ten years working extensively with technology transfer in Latin America, Barbara pursued a career as an environmental scientist working at the Office of Arid Lands, Arizona Remote Sensing Center. Her work included projects in East and West Africa. In 2003, after receiving her Ph.D. from the University of Arizona, Barbara founded Iskashitaa. Barbara serves on the state Linking Edible Arizona Forests (LEAF) steering committee, heads the UA LEAF project, and is an adjunct at the UA in the School of Natural Resources and the Environment.

Amelia Natoli is the Grants and Development Manager for Iskashitaa Refugee Network. She worked as a field archaeologist in the US Southwest for 24 years. She has a BA in Anthropology from the University of Michigan, and recently earned an MPH in Global Health at the University of Arizona. She has been writing grant proposals and managing grant-funded programs for seven years, including funding from USDA and the City of Tucson.

Cathy Lolwing is the Program Manager at Iskashitaa Refugee Network. She has seven years of experience in managing a non-profit farm that provides food to people experiencing homelessness, and to other vulnerable populations. Her skills include marketing, fundraising, volunteer management, and strategic community partnerships. Cathy also has a background in education.

### Project summary:

Can you write a few sentences to capture the project summary? Please include the project title.

This research project sought to answer how a nature-based solution such as a community garden could address socio-ecological challenges faced by university students and refugees. We found that both groups greatly benefited from the study. Both groups reported having learned new sustainability skills such as composting, rainwater harvesting, and organic gardening. Both groups indicated a greater appreciation for diversity and the role of diversity in addressing food security and social isolation issues. Finally, both groups reported to have established a closer connection to the community and expressed a desire to strengthen this connection.

This project also allowed us to better understand community needs. The greatest needs include a lack of opportunities for social and cultural engagement and access to food and other valuable resources. Both groups lack opportunities for interacting with the members of the community that are different from them. The results indicate that this interaction is crucial to each group's sense of identity and belonging. Some refugees, for example, indicated that this experience gave them a new perspective on life and allowed them to see what they can achieve in the U.S. The students, on the other hand, expressed a desire to continue learning about the refugee community through similar experiences to widen their understanding of what it means to be a refugee and to learn about different cultures.

Project activities included: student training, student-refugee gardening days, workshops and educational events, meals, final celebration, and commemorative tree planting on campus.

### Outcomes

This study led to curriculum re-development where students in the SBE program are now partnering with Iskashitaa and similar local organizations for semester-long projects to learn about sustainability and community needs. These partnerships will contribute to capacity building and betterment of the community.

The course that was redesigned as a result of this study is Introduction to Sustainability (SBE 195A). This course is one of the first courses that the students in the Sustainable Built Environments program take. It was redesigned from a lecture-based format to a community-engaged experiential learning course. This means that instead of coming to class for lectures, the students will collaborate with community organizations to learn about sustainability. The goals of the course include promoting community engagement and generating sustainability knowledge through hands-on projects with local sustainability-oriented organizations. The outcomes include demonstrating increased awareness of sustainability issues and their solutions, improved social skills, and ability to apply critical thinking.

Lastly other outcomes include:

- A formation of a long-term relationship between Iskashitaa and the SBE program;
- Ongoing engagement through future work and projects;
- Improved food security and stronger social connections between and within the participant groups;
- A video was created on the project;
- Results were shared with the City Council Ward 6 office;
- Results were presented at the National Sustainability Society Conference.