

## Cultivating multi-cultural teams: lessons learned in the “*milpa*” of an Agroecology MSc course

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### Authors' Background

Teaching team in Agroecology MSc Program at the Norwegian University of Life Sciences.

### Summary

*Traditional milpa polycultures of maize-bean-squash of Mesoamerica consistently have higher yields and are more resilient to stresses than monocultures. This synergistic outcome builds on species differences and complementarity in physiology, morphology, and resource use. In our agroecology program, milpa polycultures have inspired our educational approach; the faculty work as milperos, intentionally developing multi-cultural teams that are capable of building upon their differences.*

### Background

Learning opportunities in agroecology in the Norway MSc program have been enhanced by a rich cross-cultural diversity in student participants and instructors, with a broad array of prior academic and field experiences in many cultures and countries. Interactions in the classroom, field, and society are enriched by team research on farms and in communities in Norway. More than 200 students from 31 countries have studied agroecology in Norway during the autumn semester since 2000. Within each course there have been students from 7 to 12 different countries, and they are highly diverse in terms of learning and communication styles. In contrast to most of the intercultural business world, where the emphasis is on learning “to deal with differences”, our program focuses on learning how differences can generate synergistic productivity

### Main chapter

#### PRACTICES

Much as farmers tend their species-rich maize field or *milpa*, the central question for our work as educators is: How can we structure learning opportunities while working within communities, in order to create both bridging and bonding social capital among the diverse array of organic food stakeholders?

Current steps are:

- a. building synergistic intercultural teams that work together to contribute meaningful change in the Norwegian food system
- b. learning and reflecting on personal strengths and weaknesses within team-based project work

Together these steps result in continuing development of skills and knowledge throughout the project in addition to facilitating change within the food system. The following is an example of the construction of a team, their work together, and final self-assessment of personal and teamwork.

The aim of the case was to understand the current situation of organic food production and consumption in the Trondheim area and to develop a vision for a sustainable farming and food system in collaboration with Økomat, a group formed to develop a regional plan for ecological agriculture in the region of Trøndelag.

The student team described in Table 1 was composed from a pool of 19 students and we used the criteria of country, gender, learning and communication styles, and educational background in order to maximize team diversity.

**Table 1: Characteristics of the Trondheim student team (2012)**

Country of origin	Gender	Learning Style <sup>1</sup>	Work style preferences <sup>2</sup>	Educational background
Netherlands	Female	Assimilating	Practical organizer	Ecology
France	Female	Accommodating	Practical organizer	Agronomy
Iceland	Male	Diverging	Generator of ideas	Marketing
USA	Female	Accommodating	Passionate communicator	Sustainable building design
France	Female	Diverging	Passionate communicator	Agronomy

1 based on Kolb's theory of learning

2 based on Diversity Icebreaker® tool from Human Factors, AS

Together this group demonstrated the productivity of a *milpa*--the practical organizers were solid as the maize, the passionate communicators were the climbing beans growing up into the corn and providing nitrogen for all, while the generator of ideas was like the squash sprawling with abandon, suppressing weeds, and producing open pollinated, nutritious seeds.

The group came with fresh eyes to Trondheim and spent considerable time developing a deep and rich picture of the food system with key stakeholders. This was followed by the development of a vision for a sustainable food system in the region, including nine different viable scenarios in addition to a framework for a participatory design process both on the regional and national level.

Not all groups in the course function equally well, yet the success of each partially arises from the intentional creation of diverse groups that must work on real and challenging issues. In this way, each team comes away recognizing that "without the others in my group, I would never have come so far". In another self-assessment, the team "took advantage of our diversity, building on the strength of each".

## KEY APPROACHES

Steps in cultivating versatile agroecologists who can make bonds and bridges within and between stakeholder groups in the organic food systems is much like a farmer planting and nurturing the *milpa*, the maize-based polyculture found throughout the Americas.

### *Preparing the ground*

1. Instructors develop casework where student teams will work directly with clients with an interest in creating meaningful change in both organic production and consumption.
2. Structured teamwork and reflection are the central thread throughout the work; each team member uses experiences as data for reflection on the functioning of the multi-cultural team and self-understanding as a team member.
3. Self-awareness and understanding of mutual strengths and weaknesses are developed among students with engaging and humorous diversity icebreaker workshops. The aim is to foster self-irony and to re-orient group work away from a focus on 'dealing with conflict' and towards the appreciation of differences that enhance team productivity.

### *Planting and cultivating*

4. Assigned teams develop casework with key stakeholders in the community. Diversity of teams is intentionally maximized in order to:
  - a. deepen the knowledge, skills, and work styles available within each group
  - b. provide opportunities for successful multi-cultural experiences that can be used as a personal reference for future work.
5. Attention to project development by the faculty in conjunction with team self-reflections provides both the support and the weeding, watering and pest management as needed.

### *Harvesting*

6. Recommendations for a diverse set of key stakeholders, deeper self-knowledge, and honed skills in participatory action research.

## Conclusion

Just as farmers are most effective in harvesting a bountiful and high quality crop that come from their continual attention throughout the year, the cultivation of teamwork requires preparation of the ground by facilitators, the development of self-knowledge as team members, reflection about the functioning of the team as a whole and clarity of purpose in contributing to the improvement in the organic food system, from the local to the global.