Agroforestry Practices in Kyrgyzstan

Klara Dzhakypbekova,
Dr. Horst Weyerhaeuser (UCA/MSRI)

Hypothesis: The term ‘agroforestry system’ is not yet adapted in Kyrgyzstan’s scientific research. However, certain practices of agroforestry are already performed by Kyrgyz farmers. They could serve as a model for more sustainable farming under certain conditions.

Methods:
- literature review,
- experts and farmer interviews,
- field visits,
- profitability analysis of the selected agroforestry practice (NPV)

Main problems:
- Fodder constraints (83% of “winter” pastures degraded);
- High levels of land erosion (slope erosion, salinization);
- Conflict between forest conservation and using of forest pastures;
- Forest degradation;
- Insufficient food security;
- Lack of knowledge of farmers about agroforestry potential;
- Agroforestry is not yet adapted in Kyrgyzstan’s scientific research.

Advantages of agroforestry in Kyrgyzstan
- Less land erosion
- More fodder (use of silvopastures)
- Additional income to local communities
- Food security
- Sustainable use of forests

Results
Certain practices of agroforestry are already in use
- windbreaks,
- trees + crop production,
- trees + beekeeping,
- haymaking and collection of non-timber products in forests

Selected agroforestry practice showed higher returns in comparison to the selected conventional practice

Agroforestry has a potential for further research and practice in Kyrgyzstan:
- tool to recover degraded mountain pastures, arable lands, highland forests;
- agroforestry as climate change mitigation and adaptation measure;
- development of existing agroforestry practices;
- researching proper tree species for local natural conditions;
- overcoming of food security issues

Constraints
- Uncertainties in land ownership rights (pastures, forest use, marginal land plots)
- Lack of precise interdisciplinary research
- Limited knowledge of farmers
- Agroforestry is not recognized in the national legislation
- Lack of institutions focusing on agroforestry development

Contact address: klara.dzhakypbekova@gmail.com