

Faculty of Agricultural Sciences Department of Agricultural Economics and Rural Development

Prof. Dr. Matin Qaim – International Food Economics and Rural Development –

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Possible Topics for Master Theses

The list of topics mentioned here is not exclusive. Students' own ideas and initiatives are welcome, as long as they broadly fit into the research directions and approaches pursued at our chair. Even the topics mentioned here are flexible and can be adjusted. Many of the topics also provide scope for more than one thesis (e.g., by working on different countries).

- 1. Food aid and dietary diversity. In many poor regions, food aid transfers are a major contributor to household diets during shocks such as droughts or floods. Usually, food aid entails staple foods that are easy to transport and do not perish fast, whereas more nutritious foods are rarely included. Hence, food aid may influence household dietary diversity. Using available panel data and statistical techniques, this study examines if and how food aid affects dietary diversity among pastoralist communities in Northern Kenya (contact: Dr. Martin C. Parlasca).
- 2. Settledness and diets of pastoralists. Over the last decades, the traditional nomadic lifestyle of pastoralists in Northern Kenya has given way to settledness and semi-settledness. This shift has several consequences for pastoralists. This study will focus on potential nutritional implications. Settled or semi-settled households may be located closer to towns and markets and can carry out complementary crop farming activities, which may potentially improve diets. At the same time, settledness comes with a loss of grazing opportunities. Since livestock is the main source of food and income for most pastoralists, settledness may possibly also have negative dietary effects. Such effects and mechanisms are examined with available panel data. Solid econometric background is expected (contact: Dr. Martin C. Parlasca).
- 3. Women's employment and household welfare. In many low-income countries, women's employment is increasing, which can have multiple implications for household and individual welfare (income, women's health, child nutrition and health, etc.). This study utilizes primary data from Ethiopia and econometric approaches to analyze possible effects of women's employment (contact: Dr. Bethelhem Legesse Debela).
- 4. Land-use change, tropical ecosystems, and rural livelihoods. This multidisciplinary study examines issues of tropical deforestation, conversion of forestland to commercial crops, such as oil palm and rubber, and related effects on tropical ecosystems and farm and non-farm households' welfare. Primary (including household survey and experimental data) and secondary data for statistical analyses are available for Indonesia a country at the forefront of tropical rainforest conversion to commercial plantation crops (contact: Dr. Kibrom T. Sibhatu).

- 5. **Determinants of poverty in rural Indonesia.** Rural Indonesia has experienced improvements in household living standards over the past years. Despite this positive trend, there are still people living in poverty. Using primary panel data from 400 rural households in Sumatra (Indonesia), this study explores the determinants of poverty with a particular emphasis on land-use change (contact: Nadjia Mehraban).
- 6. The government transmigration program and village development in Indonesia. In the 1980s and 1990s, the Government of Indonesia implemented a transmigration program, relocating families from densely populated Java to less densely populated islands. The relocated families often received support to start agricultural production in their new environment. While the transmigration program was terminated, it contributed to dynamics that still seem to have repercussions for rural development today. This study will use primary and secondary data from Sumatra to analyze the impacts of transmigration on rural development and inequality (contact: Daniel Chrisendo).
- 7. Exploring relationships between households' food purchase sources and nutritional outcomes. In most developing countries, the food retail sector is rapidly evolving, with modern retailers such as supermarkets gaining in importance. Changing food environments can affect people's dietary choices and nutritional outcomes. This study explores the implications of using different types of retailers for people's nutritional outcomes based on available survey data from urban Kenya (contact: Dr. Bethelhem Legesse Debela).
- 8. **Mobile phones and livestock prices.** Mobile phones can help pastoralists in Africa to access and compare prices for inputs and outputs. Mobile phones may be particularly valuable for remote herders, since market prices for livestock fluctuate substantially across time and space. This study uses secondary data from Northern Kenya and evaluates effects that mobile phone adoption has on prices received for livestock, differentiating between herders and livestock traders. Solid econometric background is expected (contact: Dr. Martin C. Parlasca).
- 9. Sustainable Diets: How can diets with a low impact on the environment increase food security? This study analyzes relationships between people's diets, agricultural production, and the environment. Based on the current state of research and empirical evidence from developing countries, the study explores how dietary change can potentially improve both food security and environmental sustainability (contact: Isabel Knößlsdorfer).
- 10. What determines the adoption of nutrition-sensitive and gender-inclusive farming practices? Recently, there has been is a strong global, regional, and national focus in implementing nutrition-sensitive and gender-inclusive agricultural practices as key to improving nutrition in smallholder farm households. This study examines what factors explain the adoption of nutrition-sensitive and gender-inclusive farming practices in developing countries. Available secondary datasets (such as the IFPRI's Bangladesh Integrated Household Survey, BIHS, and others) can be used for statistical analyses (contact: Dr. Kibrom T. Sibhatu).
- 11. Impact of climate-smart agricultural technologies on food security in smallholder farm households. Climate-smart agricultural technologies (including improved farm management practices, adoption of drought-resistant seeds, renewable energy sources, etc.) are increasingly recommended to support transforming agricultural systems, so that smallholder farm households can become more resilient and food secure in spite of continued climate change. This study examines how the adoption of such technologies impacts smallholder farm households' food security and dietary diversity. Secondary datasets for various countries (such as LSMS-ISA) are available for statistical analyses (contact: Dr. Kibrom T. Sibhatu).
- 12. **Kitchen gardens and food security.** In most rural regions of developing countries, the share of households engaged in subsistence agriculture is still high. 'Home gardens' or 'kitchen gardens' are common among both rural and urban households, to increase the amount of readily available

fruits, vegetables, and other food items for household consumption. This study explores the role of these 'kitchen gardens' for food security and dietary quality, using available secondary data and micro-econometric methods (contact: Isabel Knößlsdorfer).

- 13. Farm production diversity, market access, and dietary quality in the small farm sector. This study analyzes the relationship between production diversity at the farm level and consumption diversity in the farm household in developing-country smallholder settings. The role of markets and agricultural commercialization will also be examined. Primary and secondary data for the statistical analyses are available for various countries (contact: Dr. Kibrom T. Sibhatu).
- 14. The implications of transforming food systems on household and individual welfare. Food systems in developing countries are transforming, causing changes in the modes of production and distribution of food. By utilizing existing micro-level data from developing countries and statistical techniques, this study analyzes the implications of transformations in agriculture and retail sectors on household and individual welfare (e.g., nutrition, income) (contact: Dr. Bethelhem Legesse Debela).
- 15. Social protection programs and food security. Food-based transfer programs have become the standard tool to address chronic food insecurity in developing countries. Nevertheless, chronic undernutrition continues to be a widespread problem. This study examines the effects of social protection programs on food security and nutrition. Micro-econometric approaches are employed to investigate important linkages using existing data from developing countries (contact: Dr. Bethelhem Legesse Debela).