

Masterstudiengang „Geographie des Globalen Wandels“ an der Universität Freiburg
Projektstudie „Food Security in Megacities in the context of Global Change“ im Wintersemester 2012/13

Stand: März 2012

Im Rahmen des Masterstudiengangs „Geographie des Globalen Wandels“ wird eine forschungsorientierte Ausbildung vermittelt, die sich an den bestehenden Schwerpunkten des Instituts für Physische Geographie und des Instituts für Kulturgeographie orientiert. Einen besonderen Stellenwert nimmt dabei die als Modul im Umfang von 10 ECTS-Punkten angebotene „Projektstudie“ ein. Das Rahmenthema der Projektstudie im Wintersemester 2012/13 lautet: „Food Security in Megacities in the context of Global Change – the Greater Bangkok case study“.

Das Modul ist als Blockveranstaltung mit Exkursion und Geländeforschung konzipiert. Englisch ist zwingende Voraussetzung!

- ✓ WS 2012/13 Blockveranstaltung mit spezifischen Aufgabenstellungen
- ✓ Ende Februar/Anfang März Vorbereitung Geländeaufenthalt, Einführung in die Themen
- ✓ Ende März/April 2013, Anfang April: Exkursion/ Geländeaufenthalt in Thailand ggfs. Verlängerung für Geländearbeiten
- ✓ SS 2013: Nachbereitung in Form eines Seminars - Block oder Semester begleitend

Es ist vorgesehen, dass die Studierenden vielfältiges Quellenmaterial (Statistiken, Dokumente, eigene Erhebungen) erschließen und analysieren. Im Rahmen dieser Arbeiten kommen unterschiedliche methodische Verfahren zur Anwendung (z.B. Kartierungen (community and participatory mapping, Aufnahme von Biodiversität), Zählung, Interviews, Textanalyse, GIS, Datenbanken, Fernerkundung, Umsetzung in kollaborative Forschungsumgebungen). Die Projektstudie bietet den Studierenden die Gelegenheit, spezifische Fragestellungen unter fachkundiger Anleitung zu entwickeln, in einen detaillierten Arbeitsplan umzusetzen und in weitgehend selbstständiger Forschungsarbeit zu untersuchen. Die Ergebnisse werden in Form einer schriftlichen Arbeit dokumentiert. Die Projektstudie ist in das aktuelle Forschungsprojekt „Understanding urban and periurban vegetable production and marketing systems through GIS-based Community Food Mapping in Greater Bangkok, Thailand“ eingebunden.

Projektkurzbeschreibung:

Urban and peri-urban vegetable production and marketing systems have the potential to contribute to poverty reduction, food and nutritional security, local economic and community development, social inclusion of marginalized groups and women in particular, as well as to enhance urban environmental management by increasing biodiversity and the productive reuse of organic wastes. This was successfully demonstrated by pilot projects such as the allotment gardens in the Philippines¹ or the low-space family business gardens in Sri Lanka².

¹ Holmer RJ & Drescher AW, 2005. Allotment gardens of Cagayan de Oro: Their contribution to food security and urban environmental management. In: Urban and Peri-Urban Development: A Comparison of Conflict

Production of vegetables in cities of the developing world faces many challenges. First of all there are major constraints due to heavily competing and conflicting interest in land, endangering existing production sites. Climate change contributes to frequent flooding, prolonged droughts and temperature extremes. To enhance the climate resilience of vegetable growers, appropriate technologies such as raised bed cultivation, micro-irrigation, and grafting, and vegetable lines that tolerate or resist abiotic and biotic stress but address market demands have been developed by AVRDC – The World Vegetable Center and its partner institutions. Integrated crop management strategies can reduce contamination from pesticides or other pollutants, can improve storage technologies, and better postharvest management can reduce production losses. These strategies can contribute to a stable, year-round supply of accessible, affordable, safe, and nutritious vegetables for consumers, help increase profits for vegetable growers and make cities greener and more liveable

However, very often the complexity of urban and periurban vegetable systems is not fully understood by regional and urban planners, city administrators and policy makers, and hence, its potential for sustainable development of urban and periurban areas in developing countries has only been harnessed to a limited extent. This proposal will investigate the potential of GIS-based community food mapping in urban and periurban areas of Greater Bangkok, Thailand, as an innovative tool to enable researchers, policy makers and the public to find information on a range of factors that affect access to healthy, affordable food, thus, addressing above mentioned constraints. Food mapping has been defined as the process of finding out where people produce, process, purchase and consume food, and what the food needs of local people are.³ It is a type of needs assessment that aims to identify the geographical areas or communities that have the greatest needs in terms of access to food. Food mapping is one method used to describe and measure a community's level of food security and is therefore not just about producing spatial maps describing physical and economic access to food. The food maps will be able to describe how people feel about local food access – for example, how culturally acceptable and appropriate it is, how convenient it is to access, how appealing it is, how safe it is to eat as well as if people have the skills and confidence needed to prepare healthier food options⁴.

Structures and Solutions. Southeast Asian – German Summer School 2005, October 16-29, 2005, Cologne, Germany: 149-155.

² Ranasinghe, T.T, 2008. Family Business Garden as an Innovative Enterprise in Urban Agriculture. *Urban Agriculture Magazine*, 19, 22-24, RUAf, Leusden, Netherlands.

³ Food Mapping for Community Food Activity: A Briefing Paper from the Scottish Community Diet Project (<http://www.communityfoodandhealth.org.uk/fileuploads/rtdn9foodmap-5241.pdf>)

⁴ USDA Food Environment Atlas (<http://www.ers.usda.gov/foodatlas/>)