

Effects of Urban Expansion and Cultural Hierarchies on Labor Strategies within Thailand's Rural-Urban Interface

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This paper explores agrarian families' use of labor diversification under conditions of environmental, political, and socioeconomic changes introduced through Thai urbanization policies. Building from literatures in development, livelihood, and migration studies, this research analyzes how state-planned urban expansion in Thailand (Nakhon Ratchasima province) alters land allocations, natural resource availabilities, and household labor organization among agriculturalists. Though stratified by class and land holdings, agrarian households' livelihoods demonstrated both degrees of dependence on natural resource availabilities and increased exposures to the Thai state's urban expansion policies and changing broader political economies. However, while state development may be viewed as coercive structural forces underpinning contemporary labor flexibilities due to the alteration of land tenure, resource availabilities, and economic systems, complex individual and household agendas shaped people's participation in and understanding of labor diversification. Ethnographic data demonstrated too the ways in which migration decisions and household provisioning strategies reflected people's understandings of Thai socio-political and cultural systems. By exploring people's engagement with culturally constructed social hierarchies, notions of modernity, and ideas of state development, this research demonstrates how cultural aspirations shape labor mobilities and remittance behaviors within agrarian transitions.

Keywords: Thailand, urbanization, migration, remittances, labor diversification.

Intersecting Urbanization, Migration, and Development

Research has indicated that Thailand's future economic growth and industrial expansion will be relocated to peri-urban³ locations and secondary cities throughout the Kingdom (Jongkroy, 2009). Since the 1990s Thailand's National and Economic and Social

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³ Peri-urbanization broadly refers to the process of urban growth in non-contiguous transitional areas between "city" and "countryside" (Allen, 2003; Webster, 2002; see also the desakota or rural-urban transitions literature such as Inwood & Sharp, 2011; McGee, 1991). As industrial activities extend into and transform rural areas, incompatible land use patterns emerge and produce pressures on environmental resources.

Development Board (NESDB) has emphasized sustainability, environmentalism, and social equity within urbanization and national development policies (e.g., NESDB, 1992, 2007, 2012; Tonami & Mori, 2007; UNDP 2007). The NESDB has responded to uneven infrastructural expansion between rural and urban spaces—including the long dominant position of the central region and Bangkok, the capital city, in the country's political economy—and to limitations placed on further industrial expansion in Bangkok's heavily congested urban center. The resulting processes of peri-urbanization have produced mixed economic activities⁴ reliant upon environmental resources in shared spaces, as well as expanded employment opportunities due to regional industrial expansion.

Scholars in fields such as anthropology, sociology, and human geography have indicated that previously existing farming households reorganize economic strategies to mediate urbanization's socio-political and environmental effects, including strategies such as crop diversification, labor flexibility, or agricultural divestment (e.g., Bryceson, 2002; Kasem & Thapa, 2011; Rigg, Veeravongs, Veeravongs, & Rohitarachoon, 2008). However, questions remain on 1) the ways in which remittances received through labor migration shape primary sector transformations (see Barney, 2012; Elmhirst, 2012; Kelly, 2011) and 2) the complex ways broader socio-cultural hierarchies and ideas on development shape families' participation in and understanding of mobility (e.g., Hairong, 2008; High, 2008, 2014; Mills, 2012).

Building from literatures in development, livelihood, and migration studies, this paper seeks to contribute to these works by analyzing how state-planned urban expansion in Thailand's Northeast or *Isaan* region alters land allocations, natural resource availabilities, and household labor organization among agriculturalists. This includes considering how agrarian households—stratified by indices such as class and land holdings—engage labor diversification and remittance sending behaviors under the conditions of peri-urbanization.

Yet, while state development has been viewed as a coercive structural force underpinning contemporary labor diversifications—due to the alteration of land tenure, resource availabilities, and economic systems—data herein demonstrate that complex individual and household agendas shape people's participation in and understanding of labor mobilities. Ethnographic data demonstrated too the ways in which migration decisions and household provisioning strategies reflect Thai people's understandings of their socio-political and cultural systems. Motivations to migrate or to engage secondary and tertiary economic sectors often derived from desires to reduce poverty and vulnerability, while aspirations for cultural citizenship⁵ also shaped decisions. By exploring families' and individuals' engagement with culturally constructed social hierarchies, notions of modernity, and ideas of development, this research demonstrates how cultural aspirations shape labor mobilities and remittance behaviors within Thai agrarian transitions.

⁴ Traditional three-sector views of economic systems position primary sectors as associated with raw materials, secondary sectors with manufacturing, and tertiary sectors with services. Quaternary and quinary sectors commonly associate with intellectual production and high-level decision-making in government, education, and private sectors, respectively.

⁵ For more on cultural citizenship and the ways in which differentiated citizenship may emerge see for example Holston (2008) or Mills (2012).

Thai Policies on Urbanization and Development

Thailand's first National Economic and Social Development Plan in 1962 established a political economy that largely favored Bangkok and its surrounding metropolitan region (Doner, 2009; McGregor, 2008). Over successive decades, Thailand's unequal economic growth resulted in evident inequalities between the metropolis and rural provinces. Long-term results shifted a considerable proportion of the Thai population into Bangkok's extended zones (Huguet & Chamrathirong, 2011),⁶ produced an uneven market-led economy with manufacturing and service industries and infrastructure concentrated in the central region (e.g., Baker & Phongpaichit, 2007; Doner, 2009), expanded congested communities (Boonyabancha, 2005; Ockey, 2004), and created a host of environmental complications such as pollution, increased traffic, flooding, and deforestation (e.g., Donovan, 2012; Fraser, 2002; Krongkaew, 1995). In 1992 the NESDB sought to address such issues by expanding urban development, infrastructure, social services, and capital availability to poorer provinces outside the central region (NESDB, 1992). Resulting government efforts have improved conditions in infrastructure, living standards, educational access, and healthcare.

Yet, growing literature has called for further improvements in urbanization. In particular, scholars in fields such as anthropology and environmental studies have argued for increased rights for communities that are marginal to controlling state interests (e.g., Amekawa, 2010; Lebel & Lorek, 2008; Kasem & Thapa, 2012; UNDP, 2007). Therefore, the Thai state has operated within political arenas that increasingly reflect concerns from sustainability studies and urbanization approaches that "give more explicit attention to equity, livelihoods, and market opportunities" for populations negatively impacted by urban development (Capistrano, 2008, 209-210). Research in peri-urban studies recognizes that, within national development trajectories, growing secondary cities and peri-urban spaces experience extensive socio-cultural, environmental, political, and economic adjustments (Jongkroy, 2009; Simon, McGregor, & Nsiah-Gyabaah, 2004; Webster, 2002, 2004). The mixture of primary, secondary, and tertiary economic sectors into one location structures competition among various actors on how to utilize shared environmental resources, and therefore how households might adjust livelihood strategies. For example, analyzing the growth of peri-urban locations surrounding Bangkok, Sajor and Ongsakul (2007, 783-784) found that fringe localities became sites of conflict over water use following the encroachment of urban land development into agricultural fields. Contaminants from industrial and domestic sources – such as sanitary sewer overflows, vehicle washing, storm water runoff, and heavy metals such as lead, chromium, and cadmium – commonly exceeded streams' assimilative capacities.

Due to the nature of mixed economies and inter-sectorial competition that characterize peri-urbanizing spaces, greater understanding is needed on the ways in which urban expansion affects socioeconomic and environmental relationships. This includes unfolding sociocultural changes among the approximately five million small-scale farming households that often locate in peri-urban zones (Amekawa, 2010; Ozturk, 2009). Of interest here are the

⁶ Internal migration dominates labor mobilities in Thailand. Due to the costs and risks associated with irregular migration, and limited availabilities for regular migration to destinations such as Japan, Taiwan, and Singapore, emigration from Thailand remains limited for much of the population. Furthermore, Gullette (2013, 133) argued that "Thailand's dominant economic role within the Greater Mekong Subregion has cancelled incentives to work within neighboring countries".

ways in which families and households that derive core income from agricultural activities incorporate labor migration and economic diversification—including remittance-sending behaviors—under conditions of urban expansion. Yet, this work also considers the complex sociocultural motivations for engaging in new livelihood strategies (such as desires to integrate upwardly into culturally constructed social hierarchies) and how aspirations might shape labor patterns.

Labor Diversifications and Remittance Behaviors

Changes introduced through peri-urbanization have created new opportunities for research to explore how people's economic, environmental, and socio-political positions within transitional spaces affect the adoption of new livelihood and household provisioning strategies. Long-term questions consider, for example, how communities in urbanizing centers manage the changes anticipated to result from ongoing government planning, including residents' responses to shifting policies and natural resource availabilities. Given the voluminous literature of livelihood strategies and the wide-ranging methodological and theoretical approaches available (e.g., Barney, 2012; Barrett, Reardon, & Webb, 2001; Borras, 2009; Chambers & Conway, 1991; Ellis, 1998; Elmhirst, 2012; Ozturk, 2009; Scoones, 2009), analysis herein is most interested in the linkages between agrarian livelihoods and labor diversification, including migration behaviors.

Since the 1990s anthropologists, human geographers, and sociologists have focused on the agrarian transition and adjustments made within households deeply linked to regional or international economic markets (see for example Hirsch, 2009; McGee, 1991; Rigg, Salamanca, & Parnwell, 2012; Rigg et al., 2008; Rungmanee, 2014). Given that in Southeast Asia, and in Thai *Isaan* provinces in particular, economic instabilities and uneven development outcomes combine with environmental variations (such as droughts, fires, or floods) and increasingly fragmented land holdings, researchers find that poor and middle-income households have diversified into non-farm economies. While households might “retain linkages with agriculture and the land for their food security” (Wittayapak & Vandergeest, 2010, 4), economic diversification and rural-urban migration among select family members represent reasonable risk aversion strategies and attempts to sustain the household (Douglass, 2014)—what Forsyth and Evans (2013) has explored as ‘autonomous adaptation’.

Regarding remittances available through migration, research throughout Asia, Africa, and Latin America has demonstrated that household remittances may decrease economic vulnerability, increase employment, and raise living standards (e.g., Cohen, Jones, & Conway, 2005; Naudé & Bezuidenhout, 2012; Taylor, Rozelle, & Brauw, 2003).⁷ Labor mobility becomes an economic strategy used under conditions of changing political and socioeconomic arrangements (e.g., de Haan, 1999; Ford, Jampaklay, & Chamrathirong, 2009; Kaur, 2010; Taylor, 1999). Thus, a central objective of diversifying into non-farm activities and sending family members into urban centers is that they may send remunerations back home.

⁷ While such positions readily fit within the “functionalist” tradition in remittance studies, perspectives situated in the “structuralist” school of thought have argued that remittances generally produce negative consequences within receiving communities.

Research has indicated that at the household level, remittances provide various avenues for debt reduction, agricultural expansion, consumptive behaviors, care for older family members, children's education, and so forth (e.g., Ford et al., 2009; Knodel & Saengtienchai, 2007). Among northeastern households' strained incomes (due to increased debt loads and diminished regional economic performance), remittances have proven increasingly important for households' abilities to repay debts or increase savings (NSO, 2007, 2014; Pootrakool, Ariyapruchya, & Sodsrichai, 2005). Considering internal migrants and irregular international migrants, remittances accounted for approximately one fourth of rural income in Thailand (ILO, 2001, 48).

The shifting political, economic, and environmental conditions within peri-urban spaces require flexibility to successfully provision the family and manage risk. For example, Ozturk (2009) found that in Nakhon Ratchasima province, agricultural households with limited resources may adjust agrarian practices, but also shift livelihood strategies within changing ecological and political economic conditions. Such adjustments include labor diversification or migration. Given that agricultural household livelihoods depend on natural resources, they experience degrees of exposure to the effects of peri-urbanization and to the state's ongoing urbanization planning. Families renegotiate livelihood strategies within contexts of social, political, and economic alterations of state development and other macro-economic events.

However, questions remain about the degree to which remittances received through labor migration shape both household economic structures and primary sector transformations or growth. Below, ethnographic data explore the ways in which classic variables such as socioeconomic positions or landholdings may correlate with migration patterning and remuneration management. Yet, this work attempts to broaden migration, remittance, and livelihood studies by considering how aspirations and understandings of sociocultural hierarchies shape families' engagements with mobilities.

Field Site and Methods

Nakhon Ratchasima province is located in the northeastern (*Isaan*) region of Thailand, approximately 260 kilometers northeast of Bangkok (Figure 1). Marked urbanization, extensive land use changes, multiple land use strategies, occupational variation, and expanding housing and residential zones characterize the districts surrounding the main city of Nakhon Ratchasima (also known as Korat or the *mueang* district). Surrounding districts experience intensive inter-regional flows of goods, people, and natural resources, which establish these sites as interface zones between rural, urban, and natural spaces (e.g., Allen, 2003; Simon et al., 2004). Urban sprawl and increasing diversification of regional industry characterize the Nakhon Ratchasima Metropolitan Area (inclusive of its peri-urban locations).

Figure 1: Map illustrating Thailand (including the location of Nakhon Ratchasima province) and the four region division system (map created by author)



Currently under Thailand's National Economic and Social Development Plan, Nakhon Ratchasima represents a new growth secondary city with one of the largest metropolitan populations for a city disconnected from Bangkok's extended metropolitan region. Although Nakhon Ratchasima is situated in the largest northeastern province with a substantial agricultural economy supported from rivers such as the Lam Takhong and the fertile lands of the northeast plateau, the region has emerged as a main industrial, economic, and transportation hub among *Isaan* provinces. Growing rice mills, tapioca manufacturing, silk production, diversifying tourism, substantial industrial expansion, and expanding railway connections linking Nakhon Ratchasima to the Laem Chabang deep sea port in Chonburi have positioned the city as the gateway to the lower *Isaan*.

Given the expanding nature of the *mueang* district and the processes of peri-urbanization in surrounding districts, fieldwork occurred in neighboring Sung Noen during a six-month ethnographic field season in 2011 (July-December). The Sung Noen district was chosen due to its complex (and competing) zoning regulations and the expanding presence of industrial activities as seen in sites such as the Seagate manufacturing center or the Nava Nakorn Industrial Zone. Data collection focused on households engaged in agricultural production beyond immediate household needs (that is, the majority of agricultural outputs were market directed). Data represented herein are part of a larger multi-sectorial comparative analysis on the effects of urbanization and changing spatialities in Thailand.⁸ The study's component detailed here explored the ways in which agrarian families engaged labor mobilities, economic diversification and remittance sending behaviors to cope with or adjust to peri-urbanization's effects. Drawing from previous work in subjectivities and rural-urban valuations of spaces and people (see Gullette, 2013, 2014), data collection also explored the ways that socio-cultural hierarchies, notions of modernity, and ideas of development shaped households' and individuals' decisions for labor migration and diversification. Considerations on individuals' and households' motivations for and views on migration were used to determine whether such subjectivities influenced remittance management.

Ethnographic methods consisted of participant observation, semi-structured and unstructured interviews, and socioeconomic data collection. Unstructured and semi-structured interview data among 38 agricultural households (heads of household or those household members engaged with agricultural work) are discussed herein. Household socioeconomic data were collected during interviews. All respondents resided in the Sung Noen district, with at least one respondent residing in each of the 11 sub-districts, or *tambons*. Efforts were made to sample respondents and agricultural households with high levels of socioeconomic, age, educational, and gender diversities (Tables 1-2). Therefore, a mixture of chained-referral and purposive sampling was used. Semi-structured interviews were also conducted with five government officials in the local agricultural administrative office; purposive and convenience sampling were used to locate these respondents. Those interviews (not explored here) focused on developing deeper understandings of uneven development in Thailand, agricultural initiatives (such as rice subsidies under the Abhisit Vejjajiva (2008-2011) and Yingluck Shinawatra (2011-2013) governments), and inter-sectorial competition for natural resources in the district and province.

⁸ The ongoing comparative study considers the ways in which state-planned urban expansion in Thailand 1) produces mixtures of primary, secondary, and tertiary economic activities reliant upon shared environmental resources within peri-urban spaces and 2) simultaneously facilitates complex labor mobilities that result in increasingly diverse and heterogeneous populations that engage multiple livelihood strategies in urbanizing centers.

All interview and fieldnote data were analyzed through thematic coding and content analysis with NVivo 9. Socioeconomic data were analyzed in SPSS 22 through descriptive statistics. Selected interview data were compressed and transferred into SPSS to see correlations between variables such as land ownership and labor migration.

Table 1: Socio-demographic profile of sample population (data represent respondent primarily associated with agricultural responsibilities in the household).

Variable	n	%
Gender		
<i>n</i> = 38		
Female	24	63.2
Male	14	36.8
Age		
<i>n</i> = 38		
18 to 30	1	2.6
31 to 44	8	21.1
45 to 59	23	60.5
60 and over	6	15.8
Marital Status		
<i>n</i> = 38		
Single	2	5.3
Married	33	86.8
Divorced	1	2.6
Widowed	2	5.3
Length of Residence in District		
<i>n</i> = 38		
1 to 19 years	3	7.9
20 to 39 years	4	10.5
40 to 49 years	13	34.2
50 to 59 years	12	31.6
60 or more years	6	15.8
Location of Farm in Sung Noen (<i>tambon</i>)		
<i>n</i> = 38		
Sung Noen	5	13.2
Sema	7	18.4
Khorat	5	13.2
Non Kha	2	5.3
Khong Yang	2	5.3
Makluea Kao	1	2.6
Makluea Mai	3	7.9
Na Klang	3	7.9
Nong Takai	3	7.9
Kut Chik	3	7.9
Education Level		
<i>n</i> = 38		
Primary	19	50
Secondary	8	21.1
High school	7	18.4
University	4	10.5
Postgraduate	0	0

Table 2: Socio-demographic profile of sample households

Variable	n	%
Highest Level of Educational Obtainment		
<i>n</i> = 38		
Primary	1	2.6
Secondary	5	13.2
High school	17	44.7
University	14	36.8
Postgraduate	1	2.6
Household Income Per Month (Including Remittances if Applicable)		
<i>n</i> = 38		
8,000 to 14,999 baht	8	21.1
15,000 to 24,999 baht	16	42.1
25,000 to 34,999 baht	7	18.4
35,000 and above	7	18.4
Substantial Household Income Derived from Secondary Economic Sector		
<i>n</i> = 38		
Yes (>40 percent)	15	39.5
No	23	60.5
Landing Holdings, Including Rented and Owned Land ^a		
<i>n</i> = 38		
4 to 19 rai	13	34.2
20 to 39 rai	10	26.3
40 to 59 rai	5	13.2
60 to 79 rai	3	7.9
80 to 99 rai	3	7.9
100 rai and above	4	10.5

^a The measurement of *rai* is commonly used in Thailand and equals 1,600 sq. meters, or 0.40 acres. The Thai *rai* is composed of four *ngaan*, or more commonly *wa* (0.25 rai).

Ethnographic Results

Household Economic Strategies and Labor Mobilities

Based on research in risk aversion strategies among rural people's livelihoods (e.g., Forsyth & Evans, 2013; Scoones, 2009), this study preliminarily hypothesized that agricultural households located in urbanizing sections of Nakhon Ratchasima would employ labor migration and income diversification under conditions of peri-urbanization. As seen in Table 3, household members primarily responsible for agricultural production engaged some type of supplementary employment over 70 percent of the time. Most argued that land fragmentation created agricultural outputs insufficient for household economies, which required labor diversification to sufficiently provision for self and household. This combined with concerns on crop instabilities and changing payment structures under different state subsidy programs (see for example Kedmey, 2013 and Srilert, 2012 for changing government rice subsidies). Additionally, the majority of households contained at least one member that worked within the secondary economic sector, either in Nakhon Ratchasima or another province; approximately 20 percent of households maintained livelihoods through primary sector labor

alone.⁹ Findings here align with research conducted in agrarian transitions that note the economic diversification and secondary sector linkages that increasingly characterize “agricultural” households in Southeast Asia (e.g., Forsyth & Evans, 2013; Hirsch, 2009; Rigg et al., 2008; Wittayapak & Vandergeest, 2010).

Table 3: Labor diversification among household and respondent

Variable	n	%
Farmer Supplementary Income or Economic Diversification ^a		
<i>n</i> = 38		
Farm work only	11	28.9
Farm work along with minor supplementary employment	13	34.2
Farm work along with major supplementary employment	14	36.8
Household Members Employment within Secondary Economic Sector		
<i>n</i> = 38		
Yes, in the past (in Nakhon Ratchasima and other provinces)	10	26.3
Yes, currently (in Nakhon Ratchasima province)	17	44.7
Yes, currently (in a different province)	3	7.9
No	8	21.1
Households' Current Engagement with Migration (Residing Outside of Household)		
<i>n</i> = 38		
Yes	17	44.7
No	21	55.3
Migration Remittances (Per Month, in Baht)		
<i>n</i> = 17		
1,000 to 2,499	3	17.6
2,500 to 3,999	3	17.6
4,000 to 5,499	3	17.6
5,500 and over	1	5.8
Irregularly sends remittances	5	29.5
Does not send remittances	2	11.8
Remittance Use in Origin Community		
<i>n</i> = 17		
Agricultural improvements / land acquisition	3	17.6
Parental care, combined with farming support	1	5.8
Parental care	2	11.8
Household support, including sibling/children support	4	23.5
Emergencies / special events	5	29.5
Did not send remittances	2	11.8

^a Minor supplementary economic activities include those that augment respondents' income less than 25 percent. Major supplementary economic activities comprise more than 25 percent of respondents' income.

Attempts to explain labor flexibilities have traditionally relied upon variables such as age, education, land ownership, and income, among others. The strength of certain variables is their correlative abilities, highlighting possible underlying structures of changing

⁹ As indicated in Table 1, 26 percent of households at the time of study had past connections with secondary sector labor. While they were currently only connected to agriculture and affiliated employment, households may have expressed interests in diversifying back into the secondary economic sector at a later date.

livelihoods. As seen in Table 4, such variables offer understandings on why individuals or households might pursue a given livelihood strategy. In particular, small landholders (<39 *rai*) were more likely to obtain “major” and “minor” supplementary employment, including respondents with primary and middle educations (refer to Table 3 for the differences between major and minor supplementary employment).

Table 4: Cross-tabulations on variables used to traditionally explain engagement with labor migration and diversification.

(n=38. Figures provided are rounded.)		<i>Primary agriculturalist labor diversification</i>			<i>Household engagement with labor migration</i>	
		Farm Work Only	Minor Supplemental Work	Major Supplemental Work	Yes	No
<i>Land Status and Ownership</i>	Owned	13.2%	7.9%	23.7%	26.3%	15.8%
	Rented	2.6%	0%	2.6%	0%	7.9%
	Owned and rented	13.2%	26.3%	10.5%	18.4%	31.6%
<i>Land Holdings Size</i>	4 to 19 rai	2.6%	5.3%	26.3%	13.2%	21.1%
	20 to 39 rai	7.9%	15.8%	2.6%	13.2%	13.2%
	40 to 59 rai	5.3%	5.3%	2.6%	2.6%	10.5%
	60 to 79 rai	5.3%	2.6%	0%	5.3%	2.6%
	80 to 99 rai	5.3%	0%	2.6%	7.9%	0%
	> 100 rai	2.6%	5.3%	2.6%	2.6%	7.9%
<i>Household Income Per Month</i>	8,000 to 14,999 baht	2.6%	7.9%	2.6%	13.2%	7.9%
	15,000 to 24,999 baht	10.5%	15.8%	15.8%	15.8%	26.3%
	25,000 to 34,999 baht	5.3%	2.6%	10.5%	10.5%	7.9%
	35,000 and above	10.5%	7.9%	7.9%	5.3%	13.2%

Similarly, households that owned small landholdings exhibited higher rates of labor migration when compared with owners of larger landholdings (>40 *rai*). Landed versus landless households also demonstrated differing engagements with migration. Households that owned land were more likely to pursue migration and remittance sending behaviors. While not presented in Table 4, when controlling for land holdings comprised of both rented and owned properties, those with greater proportions of owned plots were also more likely to use labor migration, compared with smaller landholders that rented the majority of their property.¹⁰

While this study hypothesized that labor migration would comprise a majority of peri-urban households’ livelihood strategies, data indicated that 43 percent of households had one or more household members working outside the Sung Noen district. Despite the lower than

¹⁰ Such findings reflect the ideas within functionalist migration research that landed households might either productively invest remittances in owned land or attempt to increase landesque capital through the economic benefits of migration.

anticipated frequency of currently engaged migration,¹¹ a central concern rooted in functionalist research is the degree to which labor mobilities and remittance-sending behaviors will improve receiving regions' living standards, economic conditions, and development trajectories (e.g., Cohen et al., 2005; López-Córdova, 2005; Naudé & Bezuidenhout, 2012; Yang, 2008).

Data indicated that received remittances—often directed toward consumptive purchases—were limitedly invested in agricultural production and improvements (Table 3). Land ownership and plot size often correlated to whether remittances were invested in primary sector activities. Those owning agricultural plots of sufficient size (e.g., 30 or more *rai*) invested in land improvements, machinery, or plot expansion. Increasing land prices frustrated the process of expanding one's resource base through land acquisition. In situations where households sought to invest in primary sector expansion, remunerations received were often insufficient to match rising land costs. Further, as some households sent members to work in major urban centers in Thailand, this out-migration simultaneously created labor shortages to manage the main agricultural crops among interviewed households (rice, corn, and potatoes). Such outcomes highlight concerns expressed within social science literatures on the “deagrarianization” and “deskilling” among agrarian households, combined with possible diminishments in primary sector development potentials (see Jokisch, 2002). For example, farmers that diversified into supplementary work experienced smaller yields on primary rice harvests (*na phii*), compared with respondents that focused on agricultural production as their sole livelihood (Table 5). Furthermore, it is debatable whether remittances create sufficient economic flexibilities so that households may hire additional laborers to mediate the labor gap created through migration. Remittances might prove a poor substitute for decreased household labor, particularly in contexts where households diversify into labor intensive crops to capitalize on higher market prices or increased demand. Of course, in contexts of urban expansion, land fragmentation, and industrialization's environmental effects, households adjusted livelihood strategies as adaptive responses within a changing political economy.

Table 5: Cross-tabulations exploring the relationships between primary agriculturalists' participation in secondary economic sectors and declining agricultural outputs.

		<i>Whether primary agriculturalist engaged in supplemental work</i>		
		Farm Work Only	Minor Supplemental Work	Major Supplemental Work
<i>Average rice yield per rai</i> ^a	.33 - .70	11.4%	22.9%	22.8%
	.71 - >1	23.0%	11.3%	8.6%

^a *na phii* harvest only; excludes the *na prang* harvest.

Bai,¹² now in his late 30s and the youngest of three brothers, had migrated to Samut Prakan and worked in a tire manufacturing plant for over a decade. Six years prior to our interview

¹¹ Of the 57 percent of households that were not currently engaged in labor migration, approximately 24 percent had some past labor migration experience. Percentage figures take into account household members that may have recently returned to only assist in harvest or land maintenance activities.

¹² All names used are pseudonyms.

he moved back to Sung Noen to take care of his aging father after Bai's mother passed away. Once he returned, Bai began working full time as a farmer, primarily growing rice and sugar cane. In our interview he explored several of the above themes.

Bai: There are different types of land here that cost more than others. For example, there is land – na coak – where you primarily rely upon rainwater for harvesting and growing. If there is no rainwater, then you can't harvest. This land is cheap. The other is na loom. It's basically low-lying pieces of land. And usually with that land you can grow rice more often... you have more water and irrigation. When I came back six years ago, parts of the land I took over from my father were in different places – a plot here and there. I wanted to buy some to have enough to farm. Back then I paid 60,000 baht per rai for na loom. It's gone up a lot. Now with industry it's probably 150,000 or 200,000 baht.

Author: You mentioned that your brothers in Samut Sakhon didn't want to come back. Do they send money to help out with agricultural upkeep, replacing machinery, or family expenses for your father?

Bai: They don't make as much as I do. Um, their salary is less than I make. They have overtime and side jobs they might take to make extra money. In the end they come close. What money they do send usually goes to our father's care. This allows me to focus on this work, to farm. The land is mostly my responsibility, and obviously the land that I've purchased is my concern. They might occasionally come back to help, but I'm now mostly on my own.

Author: It's hard work.

Bai: I really don't have a choice. I suppose deep down I don't like it very much. But I worry about my father; I felt like I had to come back and take care of him. And I've already invested so much in the business – buying land – so this will be what I'll do for the rest of my life. I'm actually still trying to buy more land right now, but it's expensive. And if my brothers did want to come back, there wouldn't be enough land for us to farm and get by. [He continues discussing possible changes in Sung Noen]. I worry about this land too. Right now my land isn't next to a factory or poultry plant. But I know others that are close by some. There's a lot of pollution there. The water can change color and smell different. I know some families that used to drink rain water and they can't do that anymore.

Despite Bai's assertion that his income surpassed his brothers working in Samut Sakhon, respondents often positioned agricultural income lower relative to that earned in secondary or tertiary economic sectors (along with cultural judgments against agrarian work as discussed below). As seen in Bai's narrative, within the context of peri-urbanization respondents recognized urbanization's political economic and environmental effects. Due to the ways in which zoning regulations were absent or rewritten, competing sectorial land allocations occurred. On the one hand, efforts to acquire additional lands for expansion were often frustrated by fragmentation, including industries' influence on raising land prices to prohibitive levels. On the other, concerns existed about the quality of water, particularly in canals. While in the past five years households have been able to pursue secondary rice harvests (*na prang*), respondents worried that as urbanization continued, industrial

production would decrease water availabilities. Combined with drought conditions that have marked the Sung Noen district (e.g., Tangprasert, 2014), such anxieties might persist.

In the immediate, respondents discussed point source and nonpoint source pollutions (e.g., increased chemicals, heavy metals, sewage, or urban runoff). However, such views patterned to the degree to which a household's livelihood connected with secondary sector economies. As seen in Table 6, families with significant household income derived from industry generally downplayed urban expansion's negative effects. Given respondents' understanding on peri-urbanization in the district, labor mobilities and economic diversification enabled some households to confront the (perceived) risks of urban expansion on agricultural futures. In the case of Bai, having brothers that migrated to central Thailand not only provided remittances to assist with family expenses—thereby providing him discretionary income to reinvest in land—processes of out-migration also created a sufficiently large land base so that Bai could support himself and his family solely through agricultural work.

Table 6: Cross-tabulations demonstrating mixed views on urbanization and environmental effects, correlated with households' financial investment in secondary economic sectors.

		<i>Whether households derived substantial financial income (>40 percent) from secondary sector</i>	
		Yes	No
<i>Households' primary views on industrial growth and urban expansion in the province/district</i>	Favors Industrialization/Urbanization	23.7%	7.9%
	Disapproves of Industrialization/Urbanization	5.3%	21.1%
	Mixed Opinions	10.5%	31.5%

Influence of Hierarchies and Cultural Aspirations

During data collection and analysis, the current study recognized that labor migration and diversification might be partially understood through variables such as land holdings. However, the research also sought to consider the ways in which individuals' and families' understandings of Thai cultural and socio-political systems shaped economic diversification and migration engagements. Specifically, the ethnographic research explored how families and individuals might frame their discussions of livelihoods within culturally constructed social hierarchies (e.g., *mueang* and *ban nok*, or *khon ruay* and *khon jon*), ideas of development (*gaan pattanaa*), or notions of modernity (*thansamai*).

This line of inquiry builds on research that has explored the ways in which cultural models and popular discourse in various countries draw on simplified rural-urban dichotomies and ascribe differential values to rural and urban peoples and places (e.g., Boccuzzi, 2013; Gullette, 2014; Hairong, 2008; Mills, 2012; Thompson, 2007; Vorng, 2011). While urbanization and flexible labor and capital rework spatialities and weaken rigid rural-urban dualities in Southeast Asia (see for example Hirsch, 2009; Rigg et al., 2008; Rigg & Salamanca, 2011; Vickers, 2004), these processes do not erase “class and status structures that draw from

assumed differences between rural and urban spaces and people” (Gullette, 2014, 1257). Thai social orders continue to reflect city and countryside dyads, albeit in complex ways.¹³

Respondents’ discussions on decisions to diversify and shift provisioning strategies indexed material and structural changes in the region as noted above. However, narratives commonly discussed sociocultural motivations for deagrarianization or labor migration. Respondent interviews consistently recognized occupational hierarchies that would differentiate “high” professional occupations (primarily within secondary and tertiary economic sectors) from “lower” occupations that dealt with material things, in this case agricultural production. In situations where households owned large landholdings (e.g., >39 rai), income derived from agricultural production might notably exceed average salaries earned within secondary or tertiary economic sectors. Within such economic parameters, one could comfortably position oneself and the household within the imperfect “middle class” category (*chon chan klaang*). However, access to class-influenced discretionary income does not directly translate into higher status positions or sociocultural distinction. Status in the Thai context extends beyond income and includes provincial origins, home location, occupational prestige, education, and so forth (see also Jackson, 2004 and Footnote 4).

The majority of respondents recognized that agricultural work was lower within Thai sociocultural hierarchies and this partially explained household labor diversification and migration strategies, particularly along generational lines. General assessments of life in Sung Noen noted material and infrastructural disparities between the district and the city center (i.e., Nakhon Ratchasima city), including locations such as Bangkok or Chiang Mai. Respondents commonly argued that their children, and in some cases themselves, would benefit from migrating to a larger *mueang* district. Even as employment opportunities expanded in Sung Noen, migration and economic diversification activities reflected notions that employment within a “more developed” location could offer improved socio-economic advancement opportunities, increased occupational status, and greater prestige relative to primary sector work. In this context, respondents’ notions of ‘developed’ referenced urban centers, as well as secondary and tertiary sector employment in Sung Noen. Improvements and upward movements in Thai sociocultural hierarchies were largely accomplished by exiting agrarian livelihoods.

Despite narrative shifts within state development policy that have drawn attention to the primary sector’s contributions to the national political economy – such as the NESDB’s overt discussions of sufficiency economy (*settakhit pho piang* (NESDB, 2012) or politicians’ usage of class-based rhetoric that highlights the working class (*chon chan kammakon* or the more loaded *phrai*) – respondents argued that they held lower positions of importance relative to other industries. For example, during interviews that explored the role of immigrant laborers in Thailand, consensus emerged that recognized the generally lower position of international migrants. As laborers from surrounding Southeast Asian countries might perform similar primary sector work, by association the primary sector becomes downwardly integrated within labor hierarchies (see also Sassen, 2000, 82-86). In effect, the valorization of agrarian livelihoods remains limited in public discourse.

Unsurprisingly, attempts to connect with ideas of development and modernity were partially accomplished through economic diversification and migration, which might bring

¹³ For more on recent manifestations of rural-urban differences within ongoing political conflicts see for example Fong, 2013; Hewison, 2012; Vorng, 2011; Walker, 2012.

additional forms of symbolic distinction and social prestige for the individual and household. The majority of respondents with children expressed pleasure when daughters or sons avoided agricultural work. For children younger than 18, most parents wished for them a life outside of agricultural production. Of course, frustrations existed with industrial labor too. In the following interview, Nipa, who had worked in Bangkok eight years ago and moved back to Sung Noen to start farming full time and take care of her daughter (who was at the time being raised by Nipa's mother), discussed such views.

Author: Having worked both in factories and in farming, which type of work do you prefer?

Nipa: I really like my job right now. I like gardening and agriculture. When I was married and pregnant with my children, I didn't really go out much [into the city] and just grew stuff around the house. That was nice.

Author: Did you like working in the factory?

Nipa: Well, it is not so much that I hated it. But I quit because my brother kept telling me that I shouldn't work in a factory. It can be hard work. At the time I was doing sewing for clothing companies that outsourced a lot of work to small sewing factories. I did blue jeans. But it wasn't that I hated the work. I could do it. Though I like it here more. Factory work can become tiresome, but you can't stop working. You might make more money... that's not as important to me now. I like gardening and I like growing stuff. It's hard work too, but it is on your time. You know, you have to harvest at certain times and that can be difficult. You can [harvest] by yourself but it will take a long time. And if everyone else is using a machine and they get done first, then they can start the next crop cycle and use the water. If you take your time, by the time you get ready to plant the na prang, then maybe there's not as much water left over. So you have to do it because everyone else is also doing it.

As seen in Nipa's narrative, preferences that existed for agricultural work often centered on a sense of ownership and the ability to work at one's desired pace.¹⁴ Yet, personal evaluations commonly viewed agriculture as demanding, at times competitive, and largely underappreciated within Thai social orders. Despite the complicated nature of agricultural labor and cultural views on the work, parents might wish for their children to acquire the knowledge and skills associated with agrarian production—if for no other reason to have such human capital to draw from in old age or to have alternative options should an economic downturn reoccur. However, transferring agrarian practices across generational lines proved difficult. In the following closing excerpt, Chanya—who primarily managed the household's moderately sized land holdings, as well as the vegetable stall set up in the local market—interrelated several of the above themes.

Chanya: When we plant the rice we go through the process of throwing the seeds. This is much easier and we can also till the land. However, when harvesting time comes, we usually hire people to harvest since the work is much harder. We also hire people to harvest the corn. But my husband and I do the planting and tilling.

¹⁴ Often included too were notions of organic connections with nature.

Author: And your daughter, does she help too?

Chanya: She doesn't help with farming. I don't really want her to do this kind of work. It is hard and I would rather she have a different life, better.

Author: Some people have said that farming is much easier now because you can hire people to do the harvest, plant the seeds... has it not become easier?

Chanya: There are still things you still have to do yourself, like throwing the seeds or tilling, or even spraying the field. You can hire people but it's expensive. For example, my husband is allergic to the chemicals in the spray and he can't do that work. So we hire it out... it's expensive and it takes away money that you can earn. [She continues to discuss her daughter] My daughter, though, she will have to decide whether she wants to take up that kind of work. I'll keep doing it to the point where I can't do it anymore. But if I can't do it, I don't know, something will happen. My daughter can do the work, but I'd rather she not. The money is not so bad, it's just hard. If you try, you can make a living. But I don't think... um, she has a lot of interest in it. Even when I try to show her how to throw the rice seeds, she just flails her arms about and doesn't distribute them. It's partly my fault since I never seriously pushed her to learn the work. Now it might be too late. She complains it's too hot and she wants to work in the city.

Discussion and Conclusion

These findings align with research that recognizes the varied livelihood strategies increasingly characteristic of agrarian households. Variables such as land ownership, land size, or remittance usage may highlight underlying structures of changing livelihoods among families in urbanizing spaces of Southeast Asia. Data indicated that agrarian households located within peri-urban zones of Nakhon Ratchasima commonly diversified through labor mobilities and industrial employment. These results pattern to the ways in which urban expansion has fragmented regional landholdings and created inter-sectorial usage of natural resources. For example, the likelihood of a household's sectorial diversification exhibited correlations with land holdings (type and size). As respondents discussed the need for labor diversification to successfully provide for self and household, a pragmatic concern in livelihood studies is to what degree such changes will diminish household-level primary sector development, including agricultural productivities. Demonstrated above, correlations existed between secondary sector participation and declining primary sector outputs.

However, when considering adaptive livelihood strategies in multiple regions or countries, the attempt to link changing household economies or labor mobilities to a particular variable face notable difficulties. As indicated in literatures that examine relationships between migration and development, the diversity of findings prohibit generalizations (e.g., Castles, 2009; Castles, de Haas, & Miller, 2013; Cohen et al., 2005; de Haan, 1999; Gullette, 2007, 2009, 2012, 2014; UNDP, 2009). Inconsistencies in results throughout Southeast Asia and other emerging economies suggest that other multidimensional variables need incorporation into social science research designs if researchers are to disentangle the complex relations between urbanization, agrarian transitions, and labor strategies. The current research demonstrates that traditional variables such as land holdings or ownership might partially

explain household economic strategies (e.g., whether to reinvest remittances into primary sector economies). Yet, by incorporating elements such as Thai social hierarchies, notions of modernity, and ideas on development, this work highlights the ways in which political economies and cultural hierarchies interrelate with migration engagements and economic diversification.

For example, while migration and remittances sending behaviors have been shown to positively affect receiving regions as discussed above, this requires a degree of investment among migrant laborers leaving the origin community. In the context where generational lines divide those invested in agriculture and those seeking to exit agrarian practices for valorized professional work and specialized services (see also Sassen, 2000, 82), it is questionable the degree to which these labor flexibilities and monetary flows will facilitate positive primary sector transformations at the household level. As discussed above, data showed limited direction of remittances to primary sector development. Understanding how cultural frameworks such as *gaan pattanaa*, *thansamai*, or *ban nok* might influence agrarian shifts requires detailed ethnographic work and responds to calls from scholars such as Barney (2012) and Mills (2012) for increased locally-based research that simultaneously recognizes the roles of broader politics in lived experiences. According to Borras (2009, 18) understanding development's effects in society requires analysis in class structures and agrarian producers' position within national socio-economic and cultural systems, which marks some economic activities and people as less relevant.

Researchers with applied interests will likely find much to examine in similar conditions of urban expansion, which will simultaneously rebuild livelihood studies (e.g., Scoones, 2009). Researchers might examine both structure and agency within livelihood strategies, including the diverse (and changing) micro/macro-political processes that define opportunity and constraint. Particular to Thailand for example, in what ways might Thailand's dualistic society and associated cultural views of rural and urban people influence livelihood trajectories and the valorization of certain economies? Such lines of inquiry would need to continually respond to changes within Thai political economies (such as the 2014 military coup d'état) and how such shifts in cultural and political economic systems affect people's perception of viable economic strategies and desire for migration, even if temporary.

Attempts at generalizing these findings should proceed cautiously due to non-probability sampling strategies and relatively small samples. Future research might benefit by more closely examining political access within the context of socially unequal urbanization as influential in households' or individuals' abilities to access greater political and natural resources as they pursue chosen livelihood strategies. Additionally, as suggested by Gullette (2014), research based in statistical probabilities might benefit from translating ethnographic findings into a probability and questionnaire-based research design. This would allow one to statistically test class positioning, status hierarchies, and cultural aspirations degree of influence in shaping labor mobilities and diversification. Of course, this current work demonstrates that understanding agrarian transitions benefit by using traditional research variables. However, incorporating multidimensional variables necessarily complicates agrarian studies and one's attempts to understand why particular livelihood portfolios are sustained, adjusted, or abandoned. Building cultural analysis into peri-urban research has produced a fuller picture of the relationships between migration, urbanization, and agricultural production as sketched here within Thailand's lower *Isaan* region.

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