

Intraregional Disparities in Northeastern Thailand

A contribution to the internal differentiation of a peripheral region

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1. Introduction

The development of spatial disparities has long been considered one of the classic structural characteristics of 'underdeveloped' countries. Equally classically such distribution patterns often form a gradient dropping steeply from the coast to the hinterland. Thailand fits this schema as in a textbook, although it is now classed with the Newly Industrializing Countries (NICs). City-size ranking reveals the extreme primate character of boomtown Bangkok (Fig.1; see also Kraas 1995, 1996), beside which even Nakhon Ratchasima as the second most important city merely has 4,8 % of the former's population. Only four other Thai cities have more than 200,000 inhabitants. The population densities present a similarly dichotomous picture (see Bundesministerium 1996, p.1): again, Bangkok occupies the lonely peak with 3561 persons/km²¹, and only a narrow belt of Changwat² within the Bangkok Metropolitan Region reaches middle values of between 200-1000 persons/km². All the other provinces, which together occupy more than 90 % of the country's area, have population densities frequently sig-

¹ Data for area and population after: Statistical Yearbook Thailand 1994.

² Transcription of the Thai word for 'province'. One administrative level lower in Thailand is the Amphoe, on whose statistical data the following discussion is based (see below). They are generally translated as 'districts', although this must be understood as a rough analogy. Below the Amphoe level follow the 'Tambon', similar to municipalities with several villages or districts, which further subdivide into individual 'Mubaan', villages in rural areas, smaller local districts in urban municipalities. The system is continually in flux. New administrative units are always being created, usually by dividing existing ones. This inflation of administrative units is a method popular with the Thai administration for creating new jobs. At the same time it leads however to progressive areal fragmentation, which, as regards content, makes planning continuity over larger areas difficult and, from the methodological point of view, hinders comparison over time on the basis of statistical data.

nificantly below 200 persons/km². From an economic point of view they also rank far behind the central region, whose dominant position is further reinforced by one-sided centralistic regional planning (for the development of regional planning in Thailand see Schätzl 1992, Schlörke 1992, Behrendt et al. 1991, Janisch 1988, Chivakul 1975).

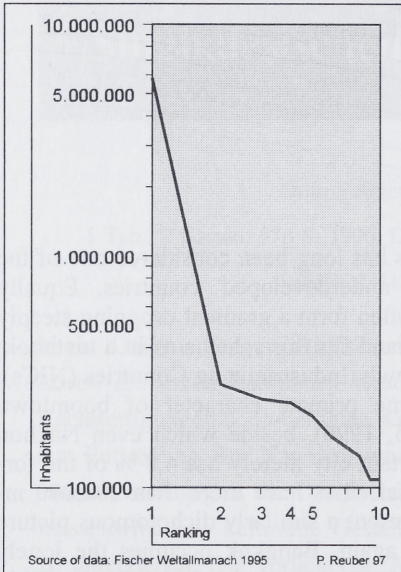


Fig. 1: Size relations and ranking of the 10 most populous cities in Thailand

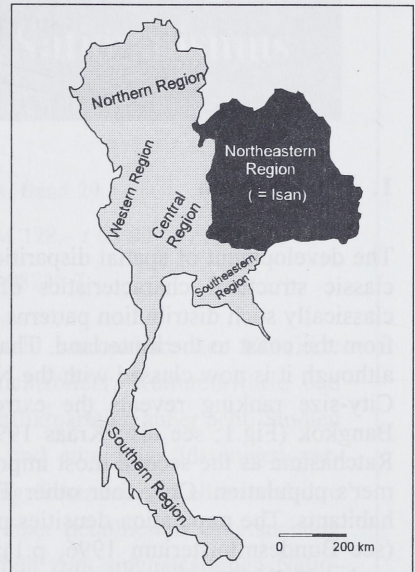


Fig. 2: The location of northeast Thailand

In the face of such extreme contrasts on a national level, the peripheral regions often acquire the generalized label of 'backward areas' in the image of outside observers. In Thailand this is particularly true of Isan, the northeast (Fig. 2), which in the literature is frequently described as the 'poorhouse' of the country (see for example Donner 1996). Economically backward (Donner 1989, Rüländ 1994), and, with 86 %³ of households having an

³ Figures for northeastern Thailand after: National Statistical Office, Office of the Prime Minister (n.d.): Population and Housing Census 1990. - Bangkok. Comparative figures for the whole of Thailand: 59% of those employed in all of Thailand work in agriculture; after: National Statistical Office, Office of the Prime Minister (n.d.): Key Statistics of

agricultural basis (far above the average), suffering considerable ecological problems (Panichapong 1985, Pairintra et al. 1985, Kubiniok 1990, Lohmann 1990, 1991, Löffler & Maas 1992, Colchester & Lohmann 1993), here the 'typical' image of a dependent ancillary area evolves.⁴

The appearance of a relatively homogenous peripheral region is however deceptive, it exists only from the perspective of a national-macroscopic examination. A closer look shows in contrast rather a heterogeneous picture of northeastern Thailand. It reveals intraregional disparities considerable in their relative dimensions and which lead to a clear spatial differentiation of this peripheral region. With the aid of population and economic data, an example will be shown of the extent to which different subregions can diverge and what types are identifiable in this context. To this end, however, the provinces sometimes used in the literature (Changwat) cannot be used as spatial units⁵, but rather one must fall back on the more finely graded system of districts (Amphoe). The distribution pattern of active and passive spaces can thereby be brought out more clearly and explained with the aid of physical and cultural geographical attributes. Only a differentiated intraregional point of view provides the basis for a more strongly endogenous regional planning and development, oriented on local potentials and problems.

The data forming the basis of the research must however be reviewed critically in relation to their relevance to the current situation⁶ and their reliability, because of the framework of statistical reports in Thailand. Although the necessary data are available for (almost) all Amphoe, they quite certainly only represent estimates for some border and mountain regions of northeastern Thailand. This is because of a series of factors which are

Thailand 1993. - Bangkok. In both cases the 'employed population 13 years and older' was enumerated (*ibid.*).

⁴ From the viewpoint of central Thailand the close cultural-historical link with Laos and the natural isolation from the rest of Thailand reinforce the perceived spatial marginalization of Isan.

⁵ These spatial subdivisions are too large to enable a meaningful regional differentiation, especially as they not infrequently straddle existing natural or economic boundaries. A regionalization on this basis would obscure existing structures and level out spatial contrasts.

⁶ Because of the delayed published availability of census data, the figures on which this research is based date from the first half of the 90s, with varying degrees of current relevance. More recent data were not available at the time of visits as guest lecturer to the Khon Kaen University in northeastern Thailand in 1996 and 1997. However, the significant figures used here should not have changed greatly, due to the noticeably dampened or indeed stagnating growth since the end of the 80s, for which the Thai recentralization policy with its return to the growth-centred ideal of supporting the main centre of the capital city region (Schätzl 1992, Schlörke 1992) is responsible.

hardly to be exactly calculated even by the local officials of the district administrations, e.g.

- the extent of population mobility in the confused, semipermeable border areas;
- the extent of 'illegal' settlement and clearance activity in mountain areas, Forest Reserve Areas or along the borders of the Nationalparks, as well as, related to this,
- the size of the population, the size of their agricultural areas etc.,
- multiple, often at least partially informal occupational activities, which make the assignation of a household to one branch or sector for statistical purposes questionable.

The following analysis attempts to take account of these limitations by interpreting the data only as indicators of scale, i.e. in a classified and thereby very generalised form. The analysis intentionally refrains from the otherwise well established procedure of multivariable regional analysis (see for example Reuber et al. 1994), in order to prevent improper overinterpretation.

2. Regional disparities in the population distribution of northeastern Thailand

Even population density reveals considerable regional disparities in Isan (Fig. 3). It shows a clearly recognisable centre-periphery drop. The peripheries of the region, low in population, are in contrast to the densely populated centre. Particularly thinly populated are the eastern areas bordering on the neighbouring states Laos and Cambodia, isolated for many years, and bounding the mountain region of the Petchabun chain which divides the northeastern Khorat Plateau from central Thailand.

However, the more densely populated centre of Isan can also be further spatially differentiated. It has two main centres of population:

- a larger central-southern population centre, which begins in the west at the connecting line between the Amphoe Chumphae and Nakhon Ratchasima and stretches eastwards to Ubon Ratchathani, as well as
- a northerly, smaller centre of population which runs along the Mekong and reaches south as far as Udon Thani.

Furthermore a series of more densely populated Amphoe stand out of this matrix. They are connected in a ribbon and thus form a triangle between the regional centres Khon Kaen, Nakhon Ratchasima and Ubon Ratchathani,

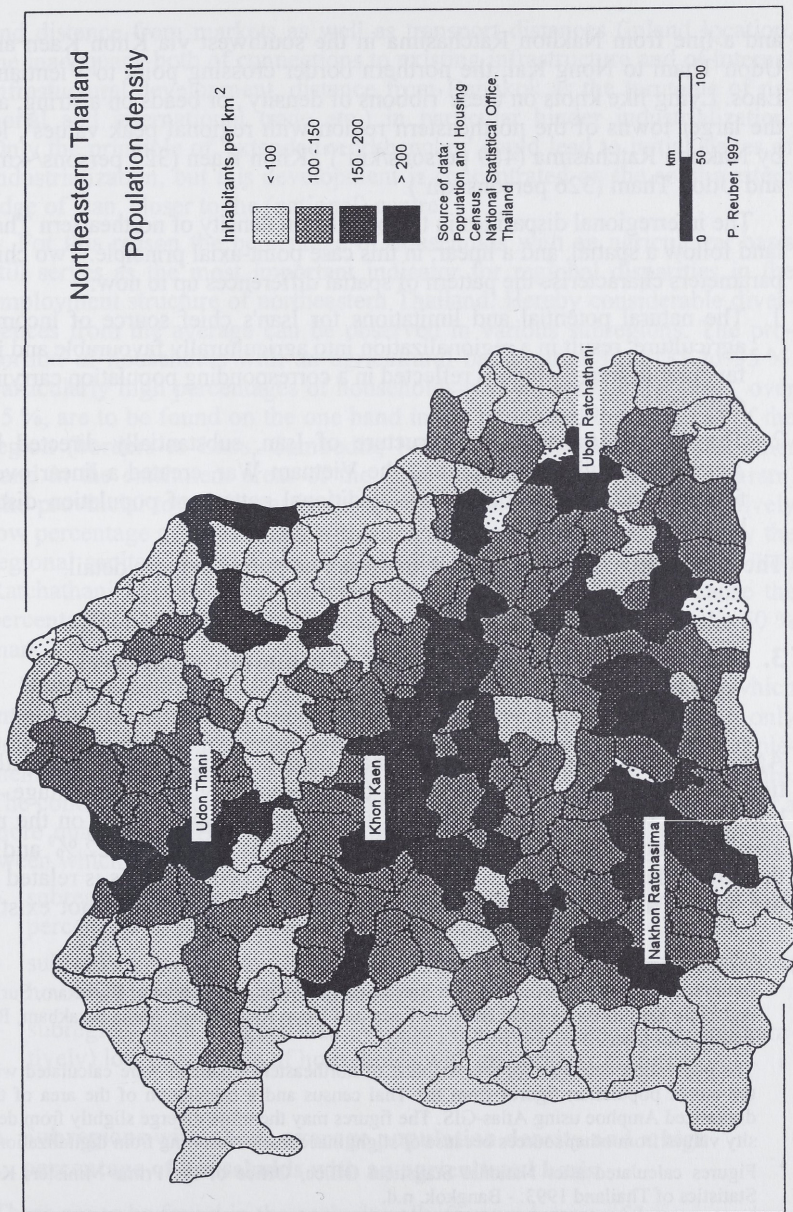


Fig. 3: Population density in northeastern Thailand

and a line from Nakhon Ratchasima in the southwest via Khon Kaen and Udon Thani to Nong Kai, the northern border crossing point to Vientiane/Laos. Lying like knots on these 'ribbons of density', or beads on a string, are the larger towns of the northeastern region with regional peak values⁷, led by Nakhon Ratchasima (489 persons/km²)⁸, Khon Kaen (327 persons/km²) and Udon Thani (326 persons/km²).

The interregional disparities in the population density of northeastern Thailand follow a spatial, and a linear, in this case point-axial principle. Two chief parameters characterise the pattern of spatial differences up to now:

1. The natural potential and limitations for Isan's chief source of income, agriculture, result in a regionalization into agriculturally favourable and unfavourable areas, which is reflected in a corresponding population carrying capacity.
2. The modern transport infrastructure of Isan, substantially directed by American activities surrounding the Vietnam War, created a linear over-forming and accentuation of the traditional pattern of population distribution.

The following section will deal with these two points in more detail.

3. Regional disparities as a result of economic structures and transport infrastructure

Agriculture has been by far the dominant source of income for the population of northeastern Thailand up to the present day. The percentage of households with an agricultural basis is extremely high at 86 % on the regional average. It exceeds the value for Thailand as a whole by 22 %⁹ and is thereby at the level of a pre-industrial developing country. This is related to the lack of alternatives: significant raw material potential does not exist¹⁰,

⁷ In the south of Isan between Nakhon Ratchasima and Ubon Ratchathani: Buri Ram, Surin, and Si Sa Ket; likewise between Khon Kaen and Ubon Ratchathani: Maha Sarakham, Roi Et und Yasothon.

⁸ The population densities for the Amphoe of northeastern Thailand were calculated with the aid of population figures from the Thai census and a calculation of the area of the digitalized Amphoe using Atlas-GIS. The figures may therefore diverge slightly from density values from other sources because of slight inaccuracies resulting from digitalization.

⁹ Figures calculated after National Statistical Office, Office of the Prime Minister: Key Statistics of Thailand 1993. - Bangkok, n.d.

¹⁰ Apart from local salt deposits, whose employment potential is minimal and the exploitation of which is extremely controversial for ecological reasons.

and distance from markets as well as transport distances (inland location, the inadequacy both of connections to existing infrastructure and of internal infrastructural development, distance from Bangkok as the turntable of national and international trade etc.) in particular hinder industrialization. Only the principle of 'extended workbenches' could lead to initial stages of industrialization, but this development is concentrated on the southwestern edge of Isan, closer to the (national) centre.

For this reason the percentage of households with an agricultural basis still serves as the most important indicator for regional disparities in the employment structure of northeastern Thailand. Hereby considerable divergences from the average can be observed in various subregions. The proportion of households with an agricultural basis varies from 35 to 95 %. Particularly high percentages of households with an agricultural basis, over 85 %, are to be found on the one hand in the peripheral border areas of the region (borders to Laos, Cambodia; Petchabun Mountains), on the other hand in the catchment areas of the large rivers Mun, Chi and Songkram. The provincial towns in particular appear as 'islands' with a comparatively low percentage of households with an agricultural basis (< 65 %). Only the regional capitals, Khon Kaen, Nakhon Ratchasima, Udon Thani and Ubon Ratchathani by now offer sufficient employment alternatives to cause the percentage of households with an agricultural basis to drop below the 50 % mark.

However an internal regionalization of northeastern Thailand, in which intraregional differences appear more clearly (see Figs. 4 and 5), can only be developed in combination with data on population density, and supplementary information on agricultural capacity and transport infrastructure. The concern here is not a 'pseudo exact' drawing of boundaries, but rather a more qualitative differentiation of three basic regional types for Isan, between which transition zones are to be found:

- subregions with a higher than average population density and a high percentage of households with an agricultural basis,
- subregions with a low population density and a high percentage of households with an agricultural basis,
- subregions with a higher than average population density and (comparatively) low percentage of households with an agricultural basis.

a. Subregions with above average population density and a high percentage of households with an agricultural basis

These are to be found in the agriculturally favoured areas of Isan, i.e. where sufficient water is available all year round and the soils are suited to rice

cultivation. Because of seasonal dry periods, such conditions exist particularly in the catchment areas of the large rivers of the northeastern region. Centres of such highly populated, favoured agricultural regions are the middle sections of the rivers Mun, Chi and, somewhat less pronounced, of the Songkram and its tributaries in the Sakhon Nakon basin (Fig. 4).

Here many of the predominantly rural Amphoe reach population densities of around 200 persons/km² (see Fig. 4), e.g. in the middle sections of the Mun and the Chi as well as southwest of Ubon Ratchathani. The proportion of households with an agricultural basis is also very high, at over 85 %, because a considerable amount of the cultivated land here consists of 'downland' with rice paddies, which, depending on local conditions, is supplemented by 'upland' plots of varying extent. If the employment structure of individual houses is examined for example, the multiple orientation of income typical for Thai conditions may also be seen here. Besides agriculture, fishing, charcoal burning and seasonal work on the part of family members in Bangkok, the tourist centres of southern Thailand or abroad frequently play a considerable rôle.¹¹

b. Subregions with a low population density and a high percentage of households with an agricultural basis

This type is to be found particularly in the border and mountain regions of northeastern Thailand. Because of a lack of alternative sources of income, often more than 85 % of households live from agriculture, but owing to the poor agro-geographical conditions, population density drops to the lowest values for northeastern Thailand, not infrequently Amphoe with fewer than 50 persons/km² are to be found.

As an example the Petchabun Mountains in the west can be cited. Significant agricultural potential is limited there to a few intramontane valleys running north-south. Otherwise several factors, besides steep slopes and low soil fertility, limit the potential for settlement and cultivation:

- In the Petchabun Mountains are forest protection zones and national parks, which are an attempt to protect the sparse remaining stands of forest. Although in their peripheral areas informal, semi-legal settlement and agriculture are often found, their extent is however relatively small because of the unavoidable conflicts with forest authorities and police.

¹¹ This aspect consistently emerged clearly during stays in the villages and conversations with the inhabitants of the provinces Roi Et and Surin. It shows once more that the underlying census data must be interpreted with great care and only as indicators of scale.

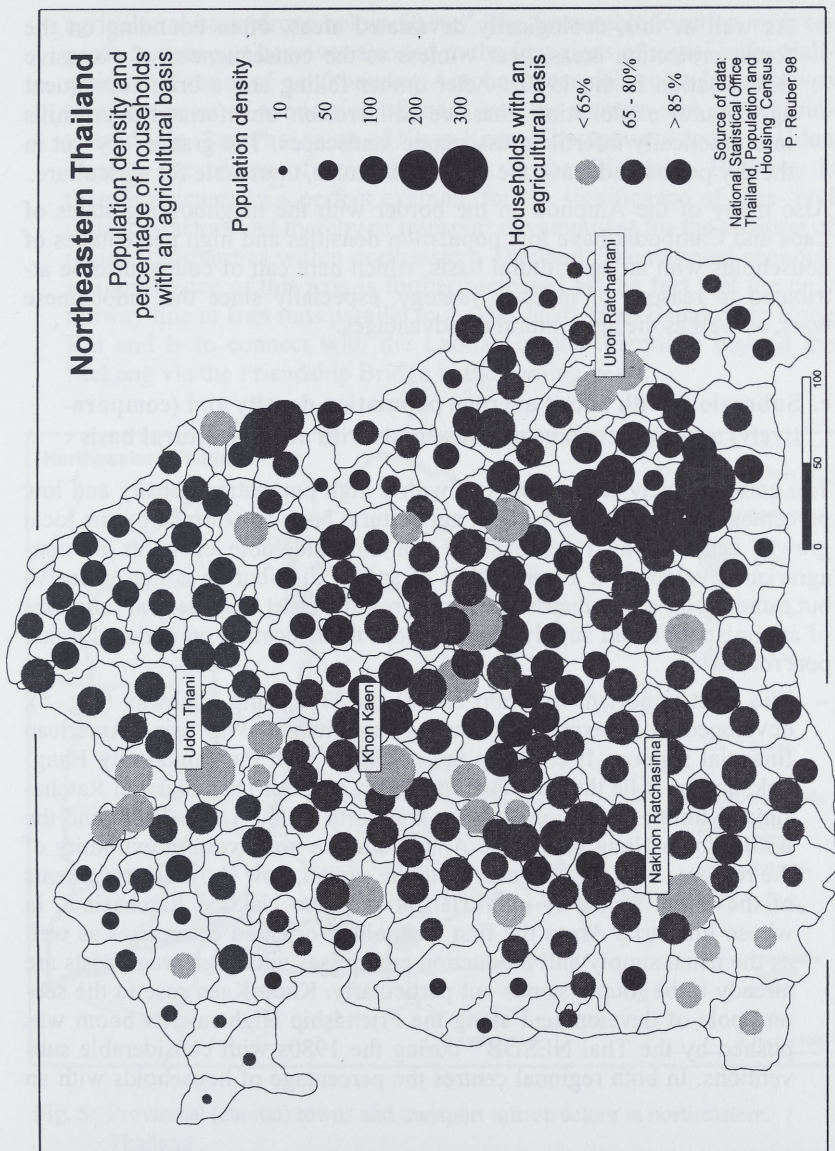


Fig. 4: Population density and percentage of households with an agricultural basis in northeastern Thailand

- As well as this, ecologically devastated areas, often bounding on the forest protection areas, bear witness to the consequences of excessive deforestation in the 1970s: After timber felling and a brief subsequent agricultural exploitation, massive soil erosion transformed many hills into practically infertile grass steppe landscapes. The grasses dry out in the dry period and leave the hills as skeletons, unuseable for agriculture.

Also many of the Amphoe on the border with the neighbouring states of Laos and Cambodia have low population densities and high percentages of households with an agricultural basis, which here can of course also be attributed to reasons of military strategy, especially since the Indochinese wars, as well as the agricultural disadvantages.

c. Subregions with above average population density and (comparatively) a low percentage of households with an agricultural basis

The comparatively few subregions with a high population density and low percentage of households with an agricultural basis are formed by the local growth centres which demonstrate not inconsiderable elements of non-agrarian development. Their pattern of spatial distribution is not extensive but rather point-axial; their significance results, apart from central functions of administrative and supply, mainly from their location on national transport routes.¹²

- The most important transport axis is the Friendship Highway (Fig. 5), developed as an expressway during the Vietnam War using American financial support. It connects the northeast with the capital city Bangkok, and on it lie the two most important cities of Isan: Nakhon Ratchasima (Khorat) and Khon Kaen, to the north follow Udon Thani and the border town Nong Khai. The Amphoe at the northwestern extremity of the region, i.e. in the part nearest to the capital, now show clear elements of the initial stages of industrialization. Here Nakhon Ratchasima, in whose Industrial Areas the first technology-oriented enterprises as well as the usual supply and production enterprises with high wage costs are already to be found, stands out particularly. Khon Kaen rose to the second pole of development along the Friendship Highway, its boom was pushed by the Thai NESDB¹³ during the 1980s with considerable subventions. In both regional centres the percentage of households with an

¹² Apart from a few more isolated Amphoe with provincial administrative towns (e.g. Loei, Nakhon Pathom)

¹³ National Economical and Social Development Board

agricultural basis drops below 50%.¹⁴ The favourable location with regards to transport however also led to the first signs of initial industrialization in a series of neighbouring Amphoe, especially near larger towns or at the point of connection of roads into the western and eastern hinterland (e.g. Ban Phai south of Khon Kaen, Khumpawapi south of Udon Thani). The ribbon of development along the Friendship Highway is therefore generally a perfect example for the significance of time- and distance-factors and thereby of transport development for the creation of regional disparities within northeastern Thailand. The regional economic significance of this axis is further increased by the fact that the only railway line in Isan runs parallel to it. This leads from Bangkok to Nong Khai and is to connect with the Laotian capital Vientiane beyond the Mekong via the Friendship Bridge in the coming years.

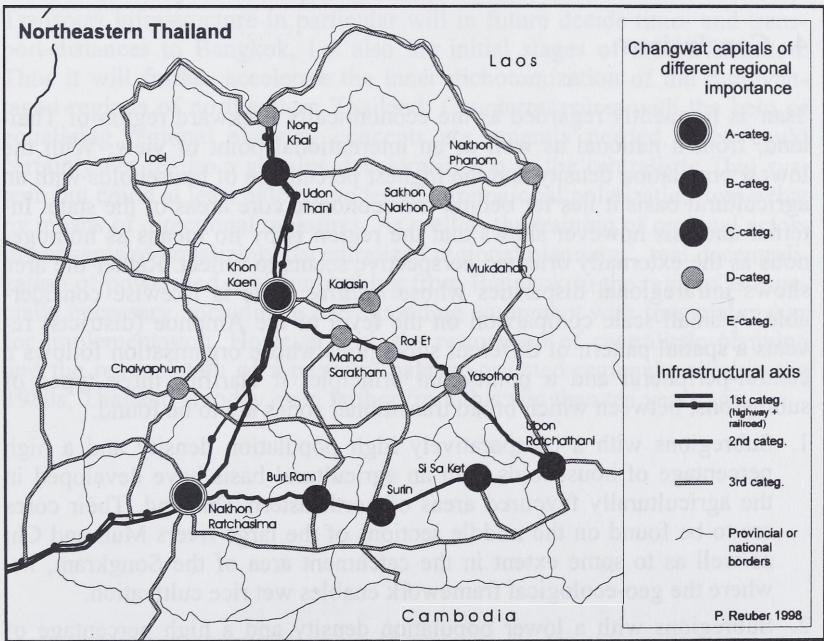


Fig. 5: Provincial (capital) towns and transport infrastructure in northeastern Thailand

¹⁴ For northeastern Thailand of course a very low value, very high however in comparison with the Bangkok region.

- The second most important transport axis opens up Isan from west to east. It branches off from the Friendship Highway in Nakhon Ratchasima and leads through the southern provinces to the southeastern regional centre Ubon Ratchathani. An extension to Vietnam is planned, current political events in the neighbouring states of Laos and Cambodia have however delayed the execution of this plan up to now. This transport axis also induces regional growth, the provincial capitals Buri Ram, Surin and Si Sa Ket lie along the route like beads on a string. A third important intraregional connecting route from Khon Kaen to Ubon Ratchathani forms, together with the east-west route and the Friendship Highway, a triangle whose general function supporting structural development in the south of Isan is also reflected in the population density map with noticeably higher values.

4. Conclusions

'Isan' is frequently regarded as the economically backward region of Thailand, from a national as well as an international point of view. With the lowest population density and the highest percentage of households with an agricultural basis it lies far behind the economic core areas of the state. Internal analysis however shows that the region is by no means as homogeneous as the externally oriented perspective seems to reflect. Rather the area shows intraregional disparities whose *relative* scale is likewise considerable. A small-scale comparison on the level of the Amphoe (districts) reveals a spatial pattern of different subregions whose organisation follows a central-peripheral and a point-axial principle. It clarifies three types of subregions, between which broad transitional zones are to be found:

1. Subregions with a comparatively high population density and a high percentage of households with an agricultural basis have developed in the agriculturally favoured areas of northeastern Thailand. Their cores are to be found on the middle sections of the large rivers Mun and Chi as well as to some extent in the catchment area of the Songkram, i.e. where the geo-ecological framework enables wet rice cultivation.
2. Subregions with a lower population density and a high percentage of households with an agricultural basis characterise the peripheries of northeastern Thailand. Here, varying from region to region, either the mountainous character of the landscape (e.g. Petchabun Mountains), existing forest conservation areas and/or the border location in relation to the long isolated neighbouring states of Indochina (Laos, Cambodia) limit economic exploitation and settlement development.

3. Subregions with an above average population density and (relatively) low percentage of households with an agricultural basis mark the economically favoured areas of northeastern Thailand, for only here does the population find alternative income sources in the non-agricultural sector at a considerable level. Spatially they follow ribbonlike the important main transport arteries of the region as a point-axial linear system: the Friendship Highway, which traverses Isan from north to south and forms the chief connecting axis with Bangkok, as well as the route-way triangle between the three development poles of the region, the towns of Nakhon Ratchasima, Khon Kaen and Ubon Ratchathani.

Agro-economic possibilities and the framework of modern transport infrastructure thereby form the two fundamental determinants of internal regional differentiation in Isan. Spatial development for the most part follows the free interplay of existing potential and forces of the market economy. Transport infrastructure in particular will in future decide time- and transport-distances to Bangkok, i.e. also the initial stages of industrialization. Thus it will further accelerate the inner dichotomization of the disadvantaged regions of northeastern Thailand. Countermeasures with the help of equalizing regional planning concepts are urgently needed. They could certainly not realise a genuine decentralization in the centralistic Thai system, but could at least help to moderate intraregional polarization somewhat by means of directional measures. As well as the training of regional actors in concepts of equalizing, decentralized regional planning¹⁵, real decentralization of power and decision-making from Bangkok to the regions is especially necessary, including a corresponding equipment with financial means for implementation. However with the restoration of centralistic planning and the renunciation of a partially balance-oriented regional policy in the 1980s, Thailand is today even farther from this aim than ten years ago.

¹⁵ E.g. through guest lectureships on topics like 'Regional planning and regional analysis' (held by the author as part of a Masters Course in the Faculty of Humanities and Social Sciences at the Khon Kaen University, Northeastern Thailand, in the spring of 1996 and 1997 respectively; financed by the DAAD).

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**Local Associations and Municipal Government
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The study operates with a three-fold-concept of local autonomy. It sees municipal government as being integrated into a network of communication flows and societal interactions. The more such interlinkages with governmental and non-statal entities exist, the greater the scope of action of the municipal government vis-à-vis the central state.

Local voluntary associations, interest groups and other intermediary organizations thus play a vital role as regards municipal autonomy and local political participation. Based on a survey of 61 local associations the authors examine the linkages between the municipal government and local associations in the Thai cities of Chiang Mai and Nakhon Sawan. The findings show that local associations contribute to an improvement or service deliveries, and increase the financial capacities of local governments, but, except for a few NGOs, do not provide them with much additional know-how or informational inputs - thus only moderately extending local autonomy. As two case studies in Chiang Mai show, some of the local associations do, however, contribute to a considerable broadening of political participation, thereby supporting the ongoing transformation of the Thai polity from a "bureaucratic" to a "bourgeois" polity at the local level.

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