### **FORSCHUNGSARBEITEN**

Unter dieser Rubrik stellt die Deutsche Gesellschaft für Asienkunde laufende und abgeschlossene Forschungsarbeiten vor. Für Hinweise seitens der Universitäten, Institute, Projekte und Wissenschaftler sind wir sehr dankbar.

## The Settlement Pattern of Southeast Asia - A Revised Theory Based on Ethnoecological Perspectives

1. The old, still as valid regarded theory:

The Proto-Malays migrating from South China to Mainland and Insular Southeast Asia at about 2500 - 1500 BC were pushed back in the mountain areas by the later coming Deutero-Malays (about 1500 - 300 BC) because of their better political organization and more effective arm potentials (i.e. VLEKKE 1965).

### 2. The facts:

It is true that the Proto-Malays and what is regarded as their descendants are nearly always living on plateaus of about 400 - 1000 m. On the contrary, the settlements of the Deutero-Malays are generally situated in the lowlands.

In Taiwan the settlements of the Proto-Malays are also situated in hilly areas, though it is proven that they lived alone there until the 17th century when Han

Chinese immigrated into the island (FRANKE 1974).

Malays swarmed out up to Madagascar. The different waves seem to have been already Deutero-Malays. Undisturbed by other ethnic groups they originally lived in the mountainous areas of that island (KOTTAK et al. 1986).

3. The own revised theory:

The Proto-Malays occupied already the higher altitudes and defended them against the later coming Deutero-Malays, and in several cases even against the colonial powers.

If possible, there must have been a preference of both Malay groups to settle

not near sea level but in mountainous areas.

# 4. The cumulative evidences:

The coastal areas are amphibic, often covered with dense mangrove forest, the soils are sometimes sterile, very acid and even toxic, altogether most unsuitable for agricultural cultivation (FINCK 1972).

The hilly areas inhabited by the Proto-Malays are quite often consisting of granite and igneous rocks with soils of a relative high fertiliy (V. BEMMELEN

1970).

The widest spectrum of plants which can be used as food is found in medium

heights (V. HALL - V.D.KOPPEL 1946-50).

Wild boar and pig, important protein suppliers to the Proto-Malays breed better in tropical heights than in lowlands (HARING-SMIDT 1971) and therefore, in the same way as deer and birds, show a higher frequency in the mountains.

The health conditions for man are better in higher altitudes. Even today e.g., six of seven of the most frequent illnesses in Central Kalimantan are more

virulent in the lowlands than in the mountains of this Bornean province (Departemen Pendidikan dan Kebudayaan 1979).

Myths, legends, and historical facts are quite important for an understanding of the present settlement patterns of Southeast Asia. Their evaluation, too, supports my revised theory. As the historical facts generally convinced best, the example of the Igorots in Luzon is quoted: "It is certainly humiliating to Spain and her government at home and abroad to realize that thousands of human beings ... not only live in pre-conquest backwardness but commit crimes and depredations, carry their audacity to the extent of demanding and collecting tribute form the Christian towns themselves without receiving castigation for their troubles and without any authority having been bold enough to impose itself upon them" (Report of 1881, cited by SCOTT 1987). Similar situations happened in Vietnam and Indonesia.

### 5. Conclusions:

Apparently by trial and error already the Proto-Malays had found out the local differences of the Southeast Asian tropics and had occupied the most fertile places. So, they have not been pushed back into the mountain areas but they have been pulled to these regions by their advantageous ecological conditions.

The Deutero-Malays could not expel the Proto-Malays from these most favoured regions and only therefore they settled the second-best locations: the lowlands, and more exactly, the annually inundated and naturally fertilized river banks with the immediate hinterlands.

Areas largely vacant of population until the most recent times did not remain so just by chance, but because of their low nutrient potential. To avoid further failures the location of expensive colonization schemes in such regions should only be undertaken after a quite intensive and detailed examination of their ecological resources.

#### References

- Bemmelen, R.W. van, The Geology of Indonesia, The Hague: Martinus Nijhuis, 1970
- Departemen Pendidikan dan Kebudayaan, Monografi Daerah Kalimantan Tengah, Palangka Raya: Department Press, 1979
- Finck, A., Fruchtbarkeit tropischer Böden. Handbuch der Landwirtschaft und Ernährung in den Entwicklungsländern, T.2, Stuttgart: E. Ulmer Verlag, 1971
- Franke, W., China Handbuch, Gütersloh: Bertelsmann Universitäts-Verlag, 1974
- Hall, C.J.J. van C. van de Koppel, De landbouw in den Indischen Archipel, The Hague: W. van Hoeve Ltd., 1946-50
- Harig, F. D. Smidt, Schweine. Handbuch der Landwirtschaft und Ernährung in den Entwicklungsländern, T.2., Stuttgart: E. Ulmer Verlag, 1971
- Kottak, C.P. et al., Madagascar. Society and History, Durham: Carolina Academic Press, 1986
- Scott, W.H., The Discovery of the Igorots. Spanish Contacts with the Pagans of Northern Luzon, Quezon City: New Day Pubishers, 1987
- Vlekke, B.H.M., Nusantara. A History of Indonesia, The Hague: W. van Hoeve Ltd., 1985

Gerd R. Zimmermann