Foreword

In order to develop „sustainable systems of land use“ in the tropics, the indigenous or local knowledge is being more and more considered for the recording and evaluation of soil ressources. For developing projects, for example, it is assumed that technological support can be provided in a better and more effective way when participation, perception and local knowledge - concerning autochthonous adapted systems of land use and soil quality- are taken into account. Nevertheless, the application and scientific utilization of local knowledge about soils and its classifications has been scarcely developed, compared to ethnological and pedological methods of analysis. Thus, the term „participatory investigation“ often merely describes local knowledge.

Considering the farmers‘ knowledge about „management of land use“, as well as empirical experience of cultivation, in this study it is tried to relate the local knowledge to the soil fertility parameters. In the course of this ethnopedological approach, it is attempted to derive plants indicating of soil quality.

The field study was carried out in the watershed of the Cabuyal River, in the department Cauca, Colombia. On the basis of a long-standing soil data bank of the Secretary of Agriculture and the CIAT, the temporal development (since 1970), as well as the correlation of chemical soil parameters with the local plant indicators could be well derived. Indicating plants for “good” and “bad” soils of different fertility correlate significantly with classical parameters of soil

fertility. Furthermore, it becomes evident that the local soil classification is defined according to soil parameters as well as to cultural parameters of use.

This dissertation shows how local knowledge about soils can be integrated into an evaluation of soil fertility and the planning of soil use, in a time-saving way. We hope that these insights will also be applied by agencies of development and NGOs for rural developing projects.

Gerhard Gerold Göttingen, December 19 2004