

**MINISTRY OF AGRICULTURE AND COOPERATIVES
THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA**

**THE STUDY
ON
THE CAPACITY BUILDING AND
DEVELOPMENT
FOR
SMALLHOLDER IRRIGATION SCHEME
IN
NORTHERN AND LUAPULA PROVINCES
IN
THE REPUBLIC OF ZAMBIA**

GIS ATLAS

JULY 2011

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
SANYU CONSULTANTS INC., JAPAN**

FOREWORD

This GIS ATLAS is a part of the outputs from the Study on the Capacity Building and Development for Smallholder Irrigation Scheme in Northern and Luapula Provinces in the Republic of Zambia. The Study was commenced in March 2009 and carried out for a period of over 2 years in partnership with all those concerned officers of the Ministry of Agriculture and Cooperatives.

The Study area covers Northern and Luapula provinces with 12 districts in Northern and 7 districts in Luapula province respectively. Total area of the two provinces is 198,393 sq.km equivalent to about 445 km square, which accounts for 26 % of the total national land. According to the National Census 2000, total population of the two provinces as of year 2000 is about 2 millions with the population density of 10 persons per sq.km. One of the typical characteristics of the Study area, and to greater extent of Zambia, is the low population density.

Northern province shows large extent of plateau areas in general, but according to location it has a different topography or mixed topography; e.g. high mountain range area in the eastern and northern parts, plateau in the central and southern parts, flat wet areas in the western part, and swamps and rivers dotted all over the province. The main lakes are Lake Tanganyika in Mpulungu district, Lake Bangweulu in Chilubi district and Lake Mweru Wantipa in Kaputa district. The main rivers are Chambeshi, Luangwa, Kalungwishi, Lukulu and Lubansenshi Rivers.

Luapula province spreads from north to south in a relatively narrow band: 450 km stretch from north to south direction against 120 km stretch from west to east direction. The topography varies from very flat wetland to a valley-like rugged hilly area. For example, approximately two thirds of Samfya district, where most of the Lake Bangweulu lies, is covered by lakes, swamps, rivers and *dambos*. On the other hand, Chiengwe district, located at most northern part of Luapula province, has many valleys along the lakeside and lower areas of the valley land. Due to earth's land formation, the valley areas are undulating, leaving much of the valley with a lot of streams and rivers.

With above background, considerable quantities of data were collected from relevant offices and assembled. The availability of this data and the desirability of presenting it in a spatially referenced framework led to a conclusion to produce a Geographical Information System (GIS) based digital maps in order to help development planners, practitioners, and government policy makers make sound decision in their working horizon.

Special acknowledgement goes to the officers of Technical Services Branch under the Department of Agriculture both at the Headquarters as well as at field level for the leading role of facilitating related field surveys as well as for their supports in collecting data and information included in this atlas. It is our sincere hope that this atlas will serve as a reference point and guide to those who wish to understand more clearly the situation of the Provinces.

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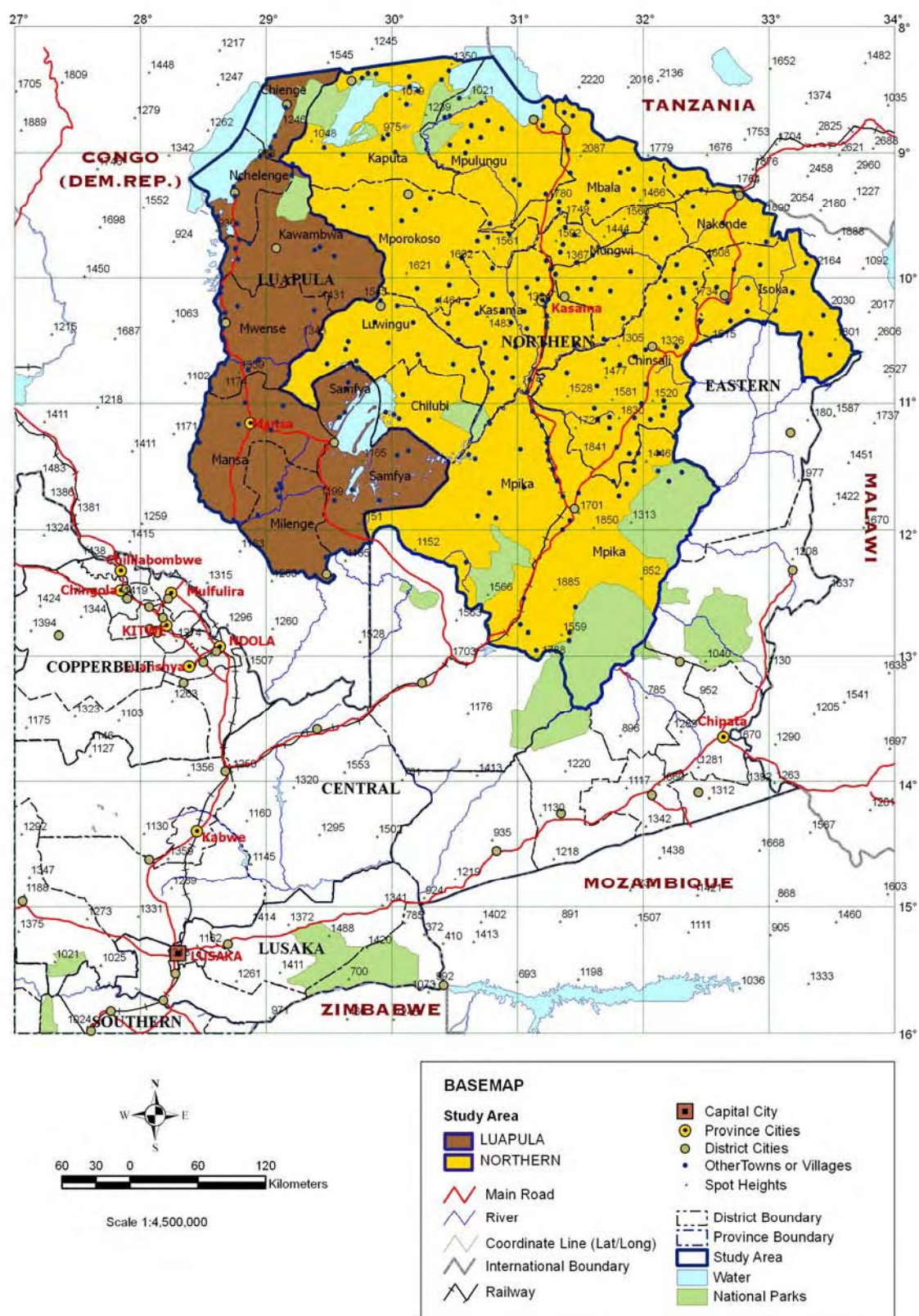
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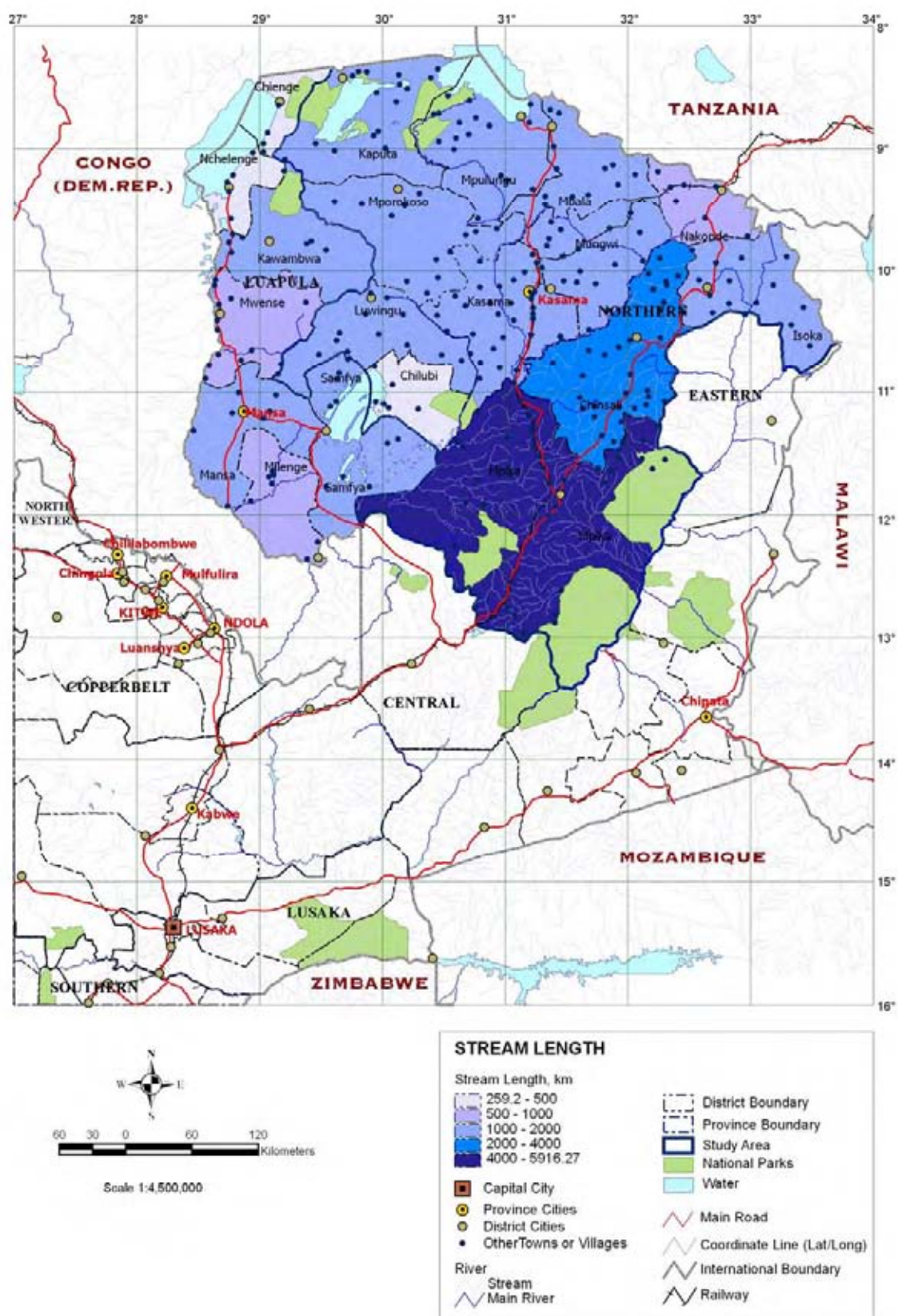
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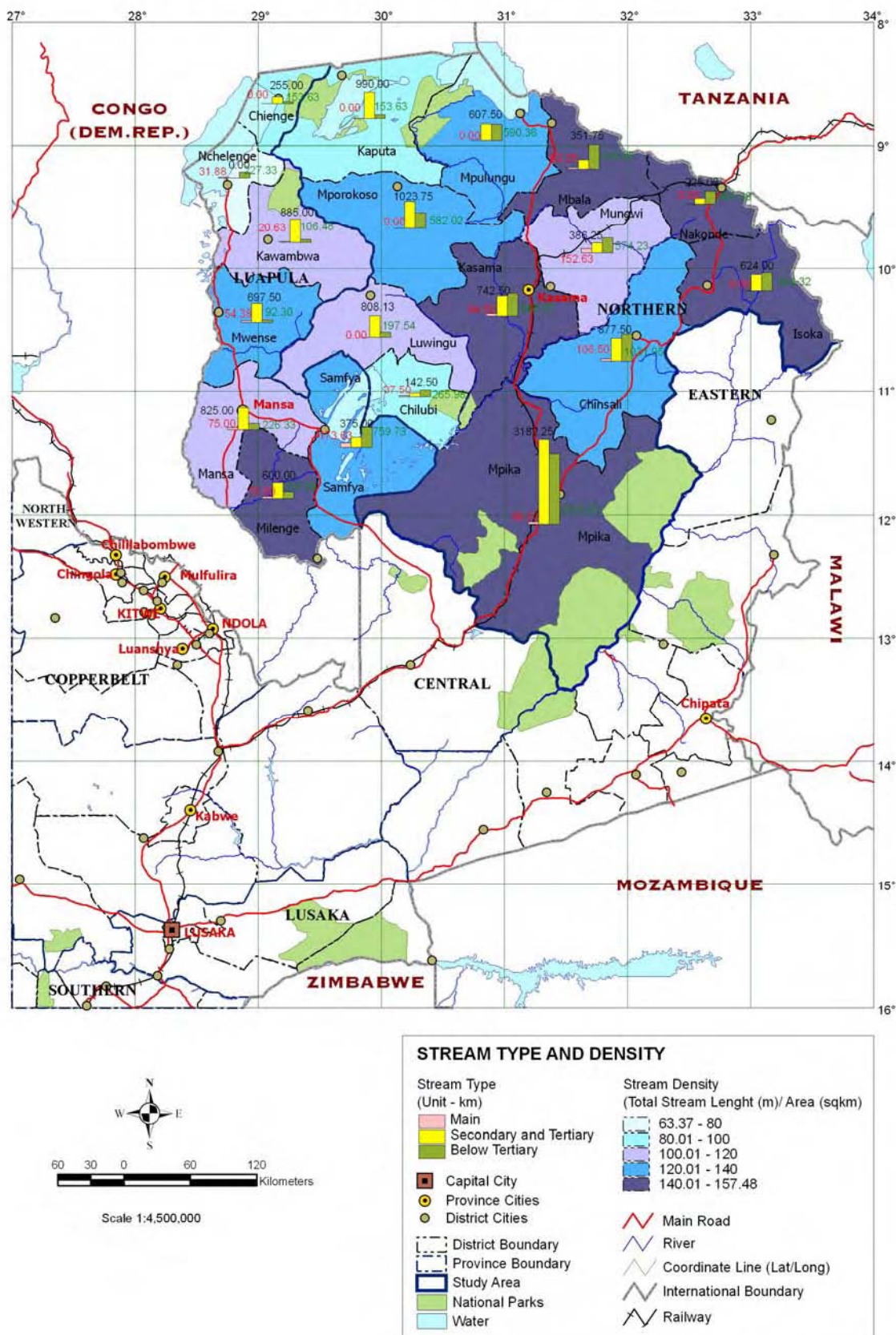
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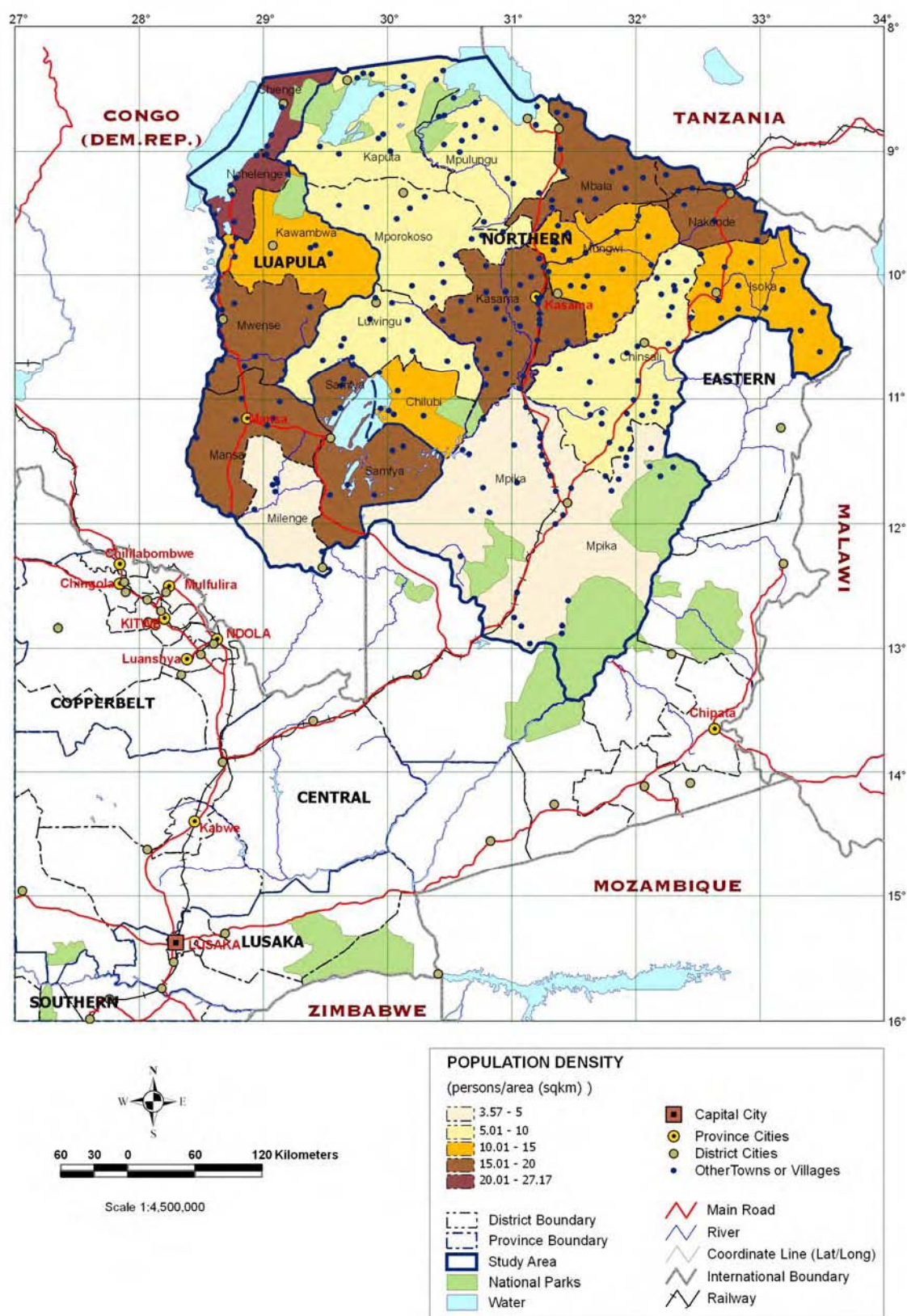


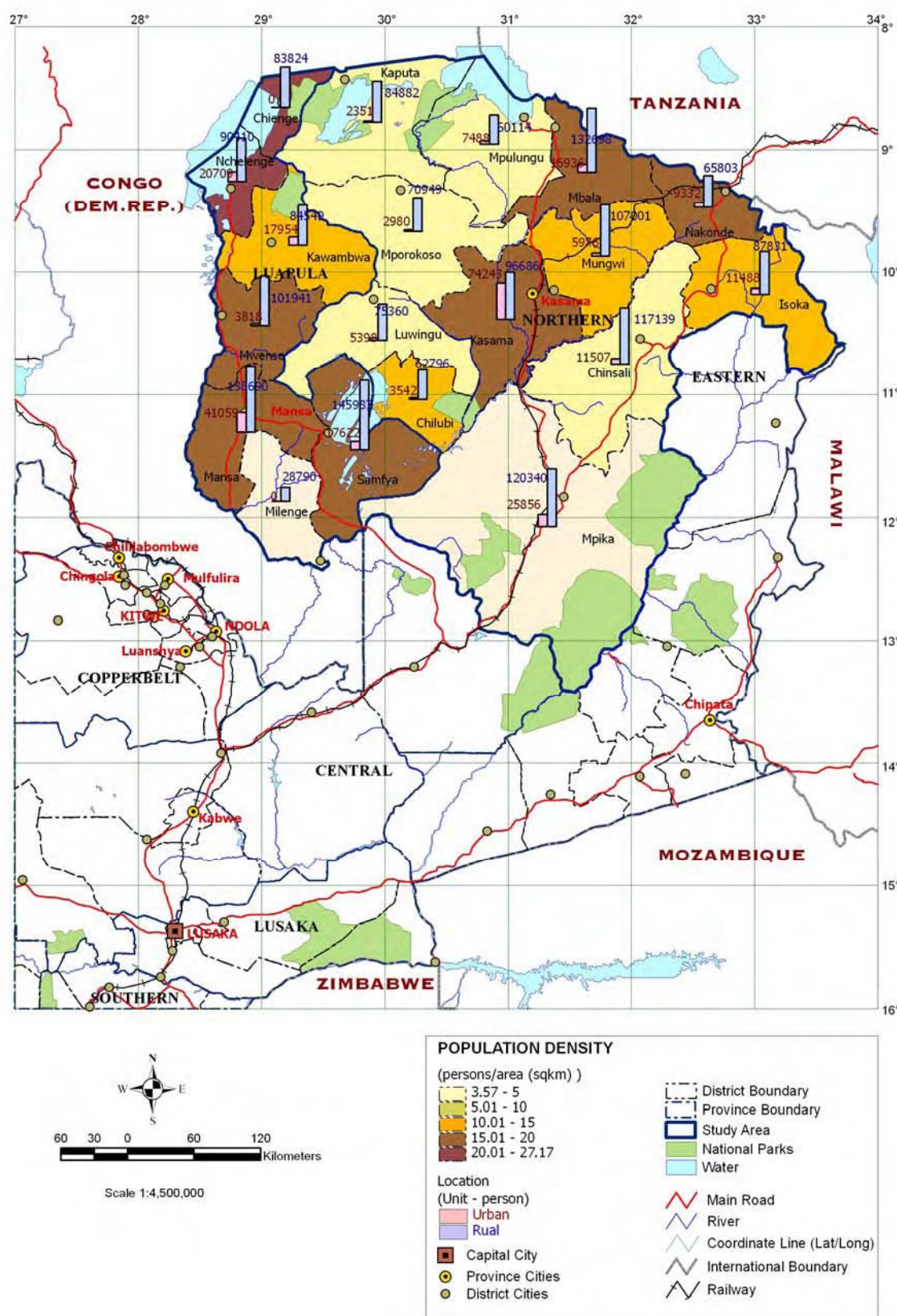
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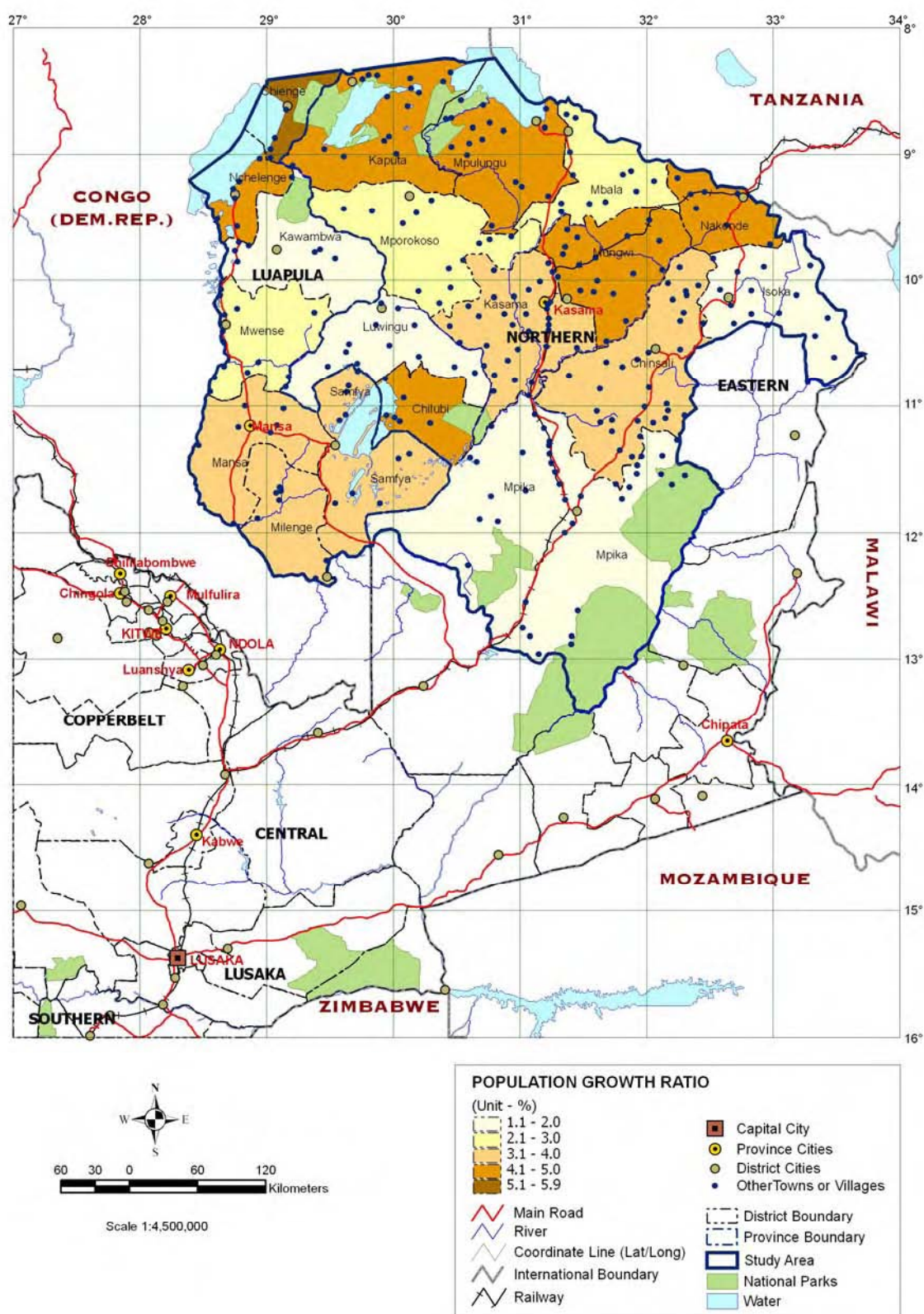


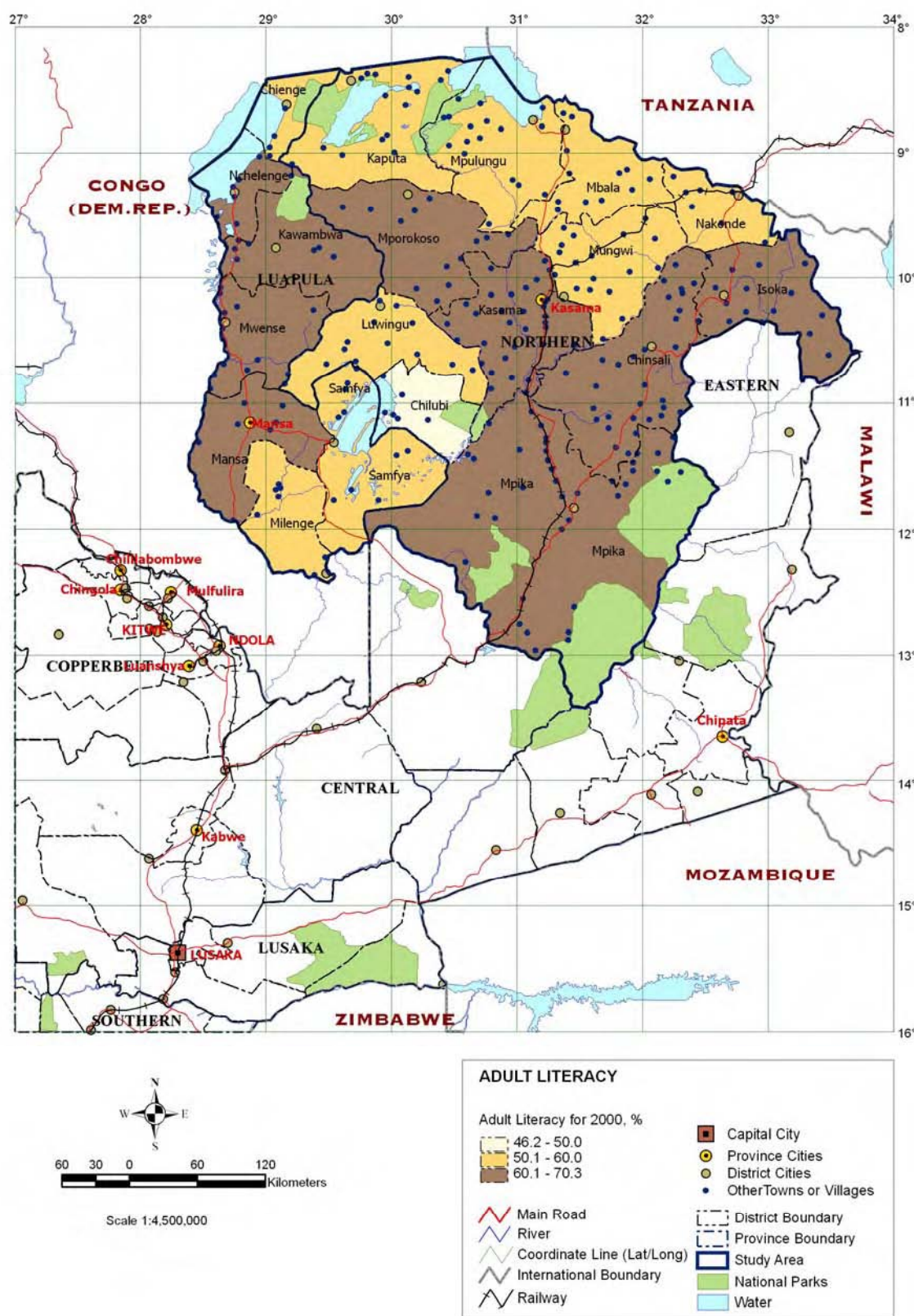
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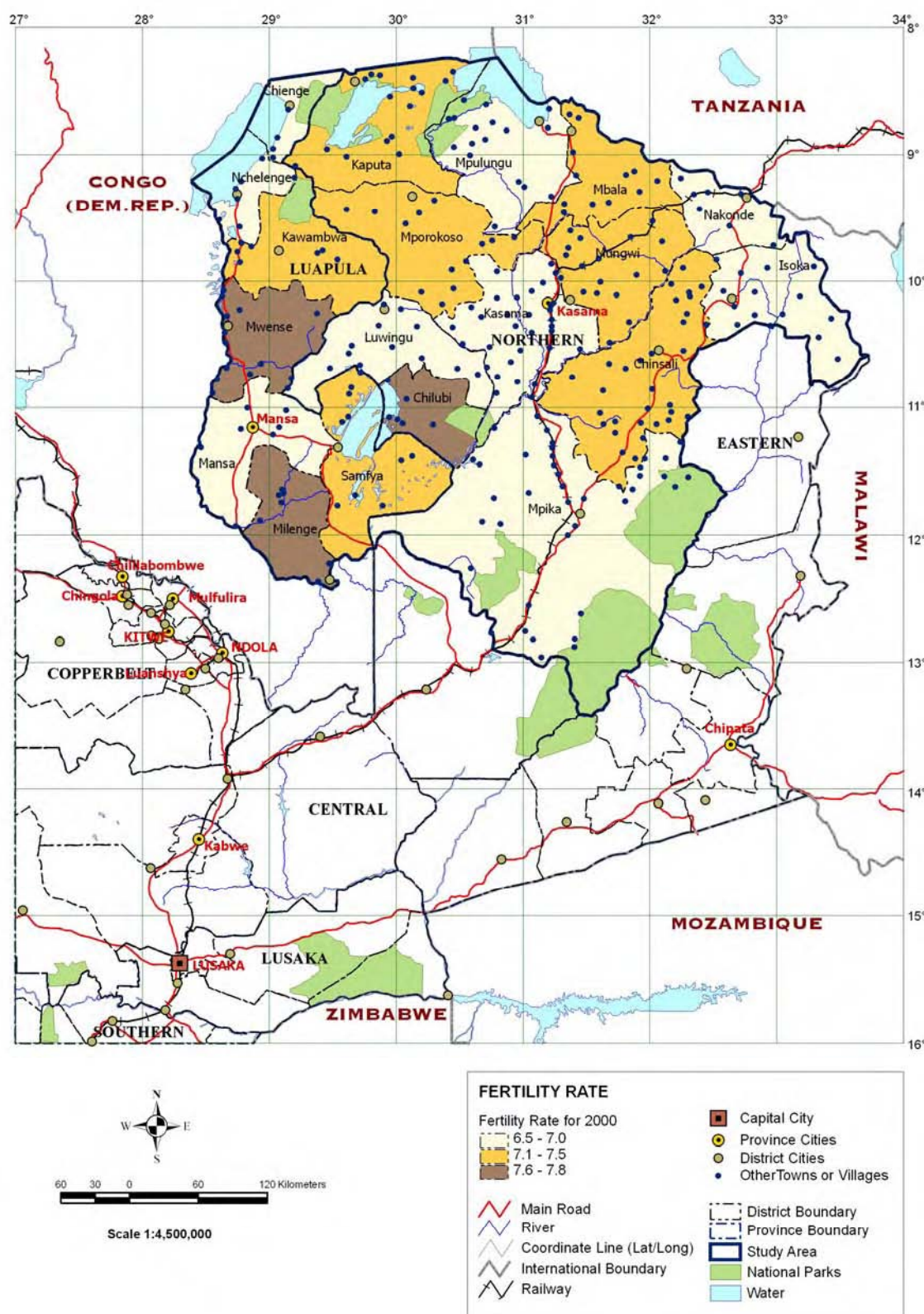


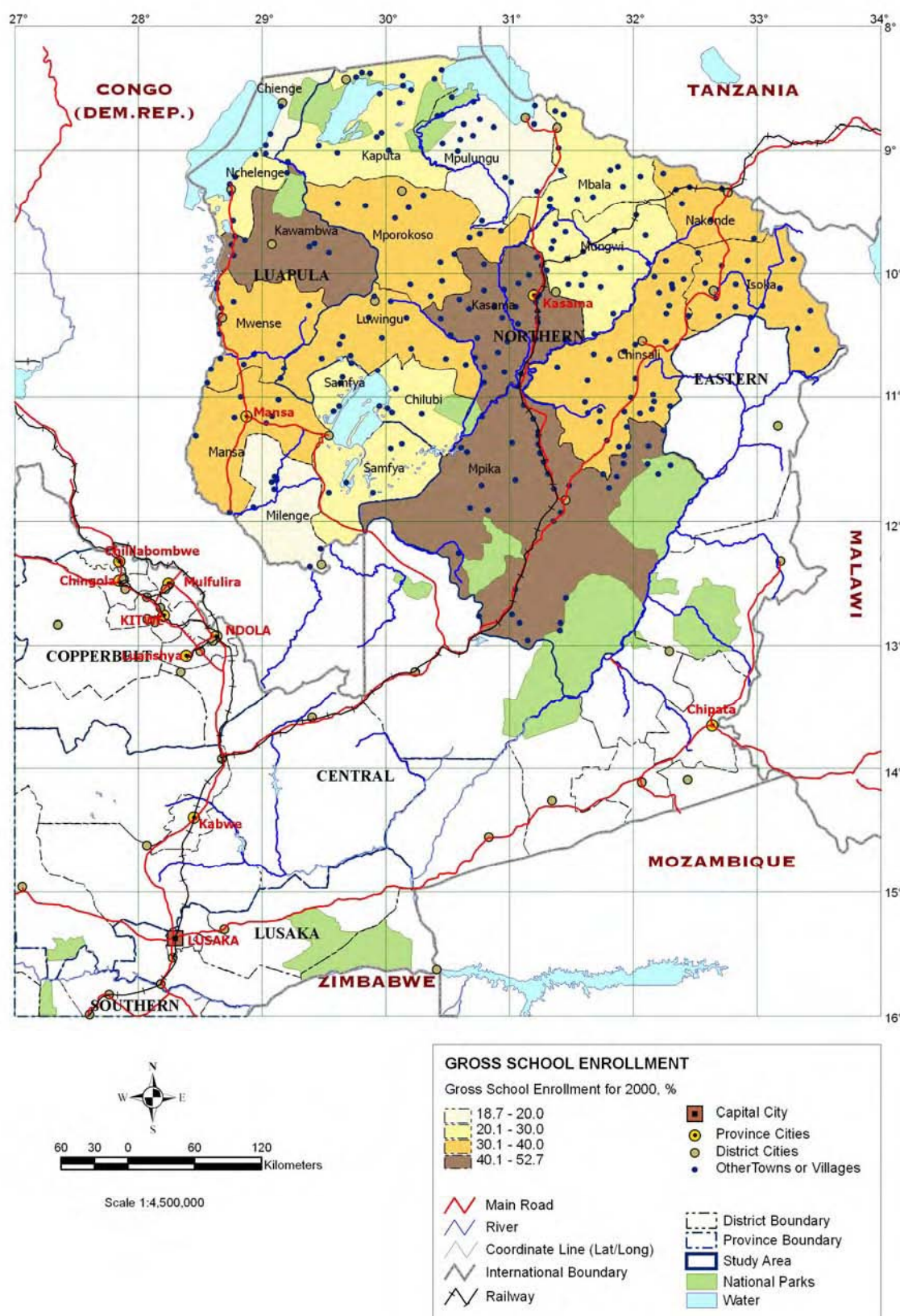
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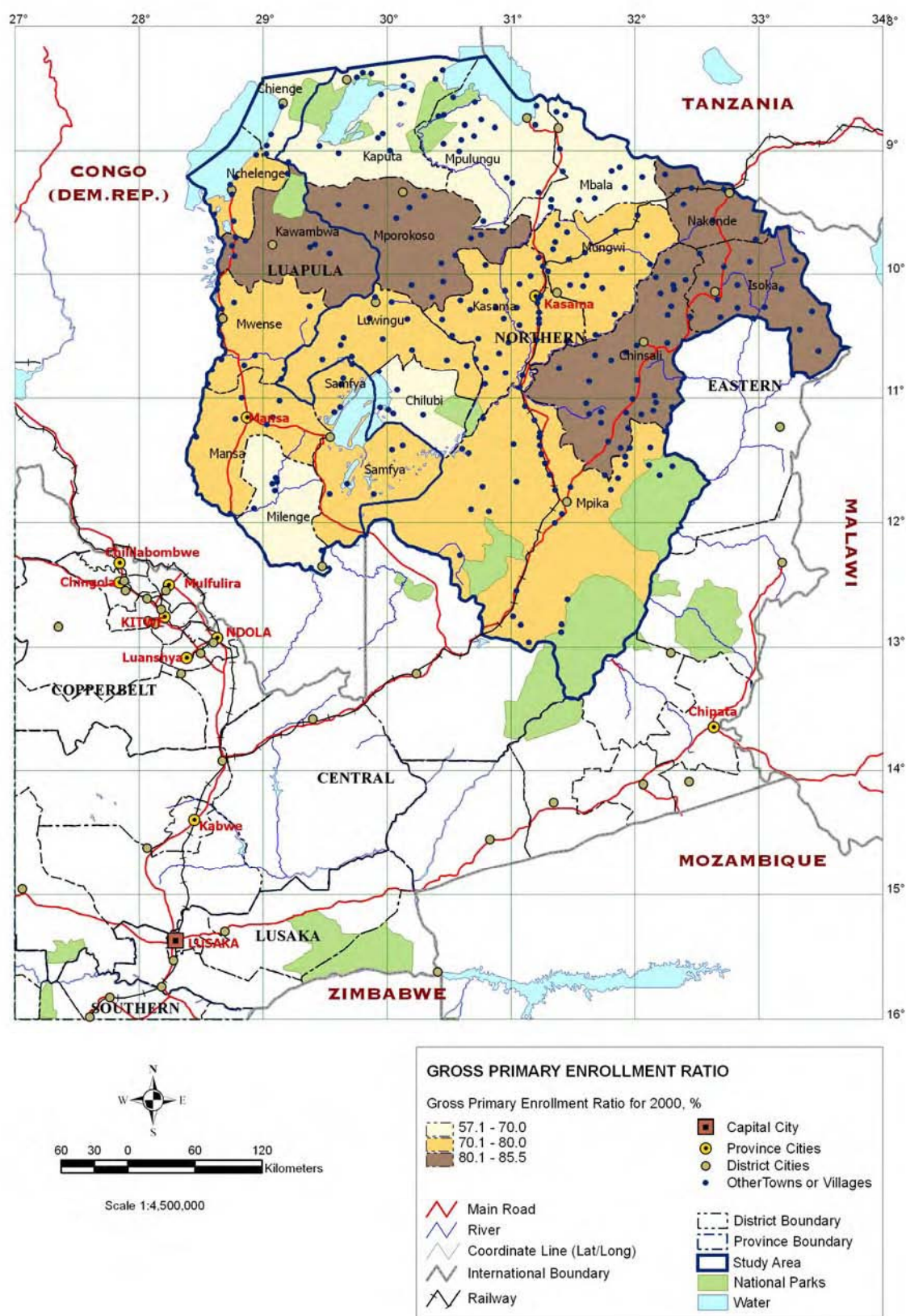
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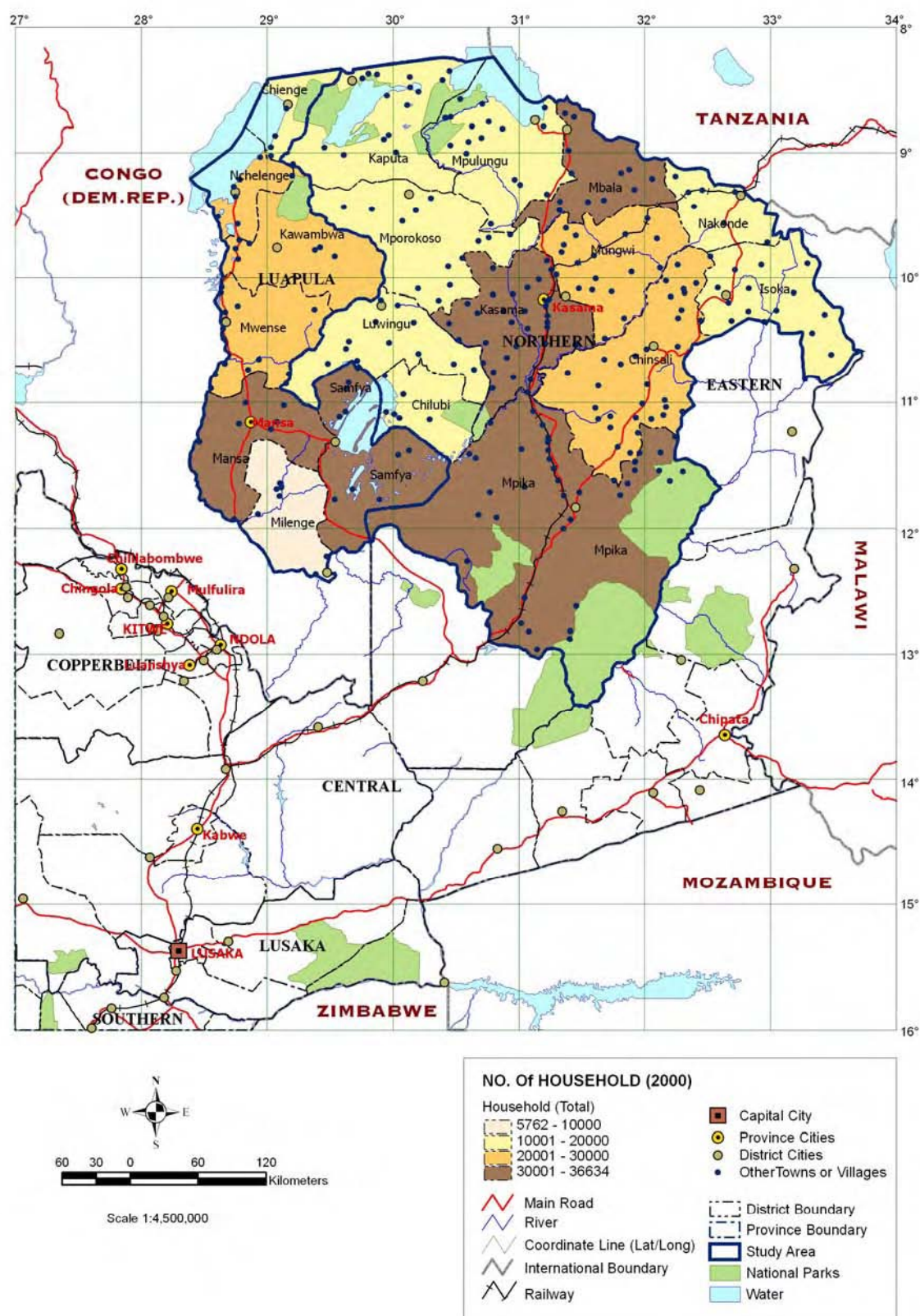
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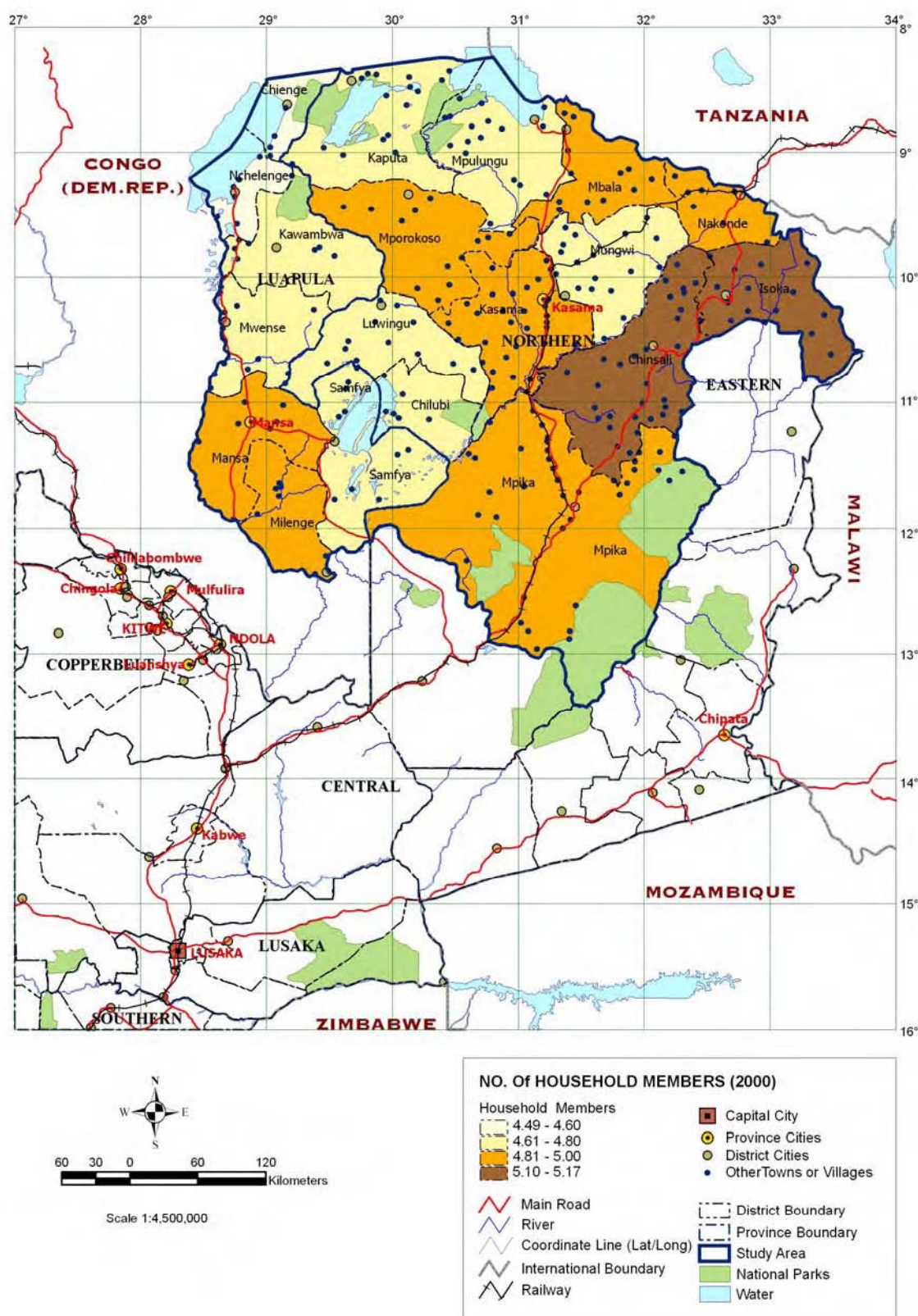
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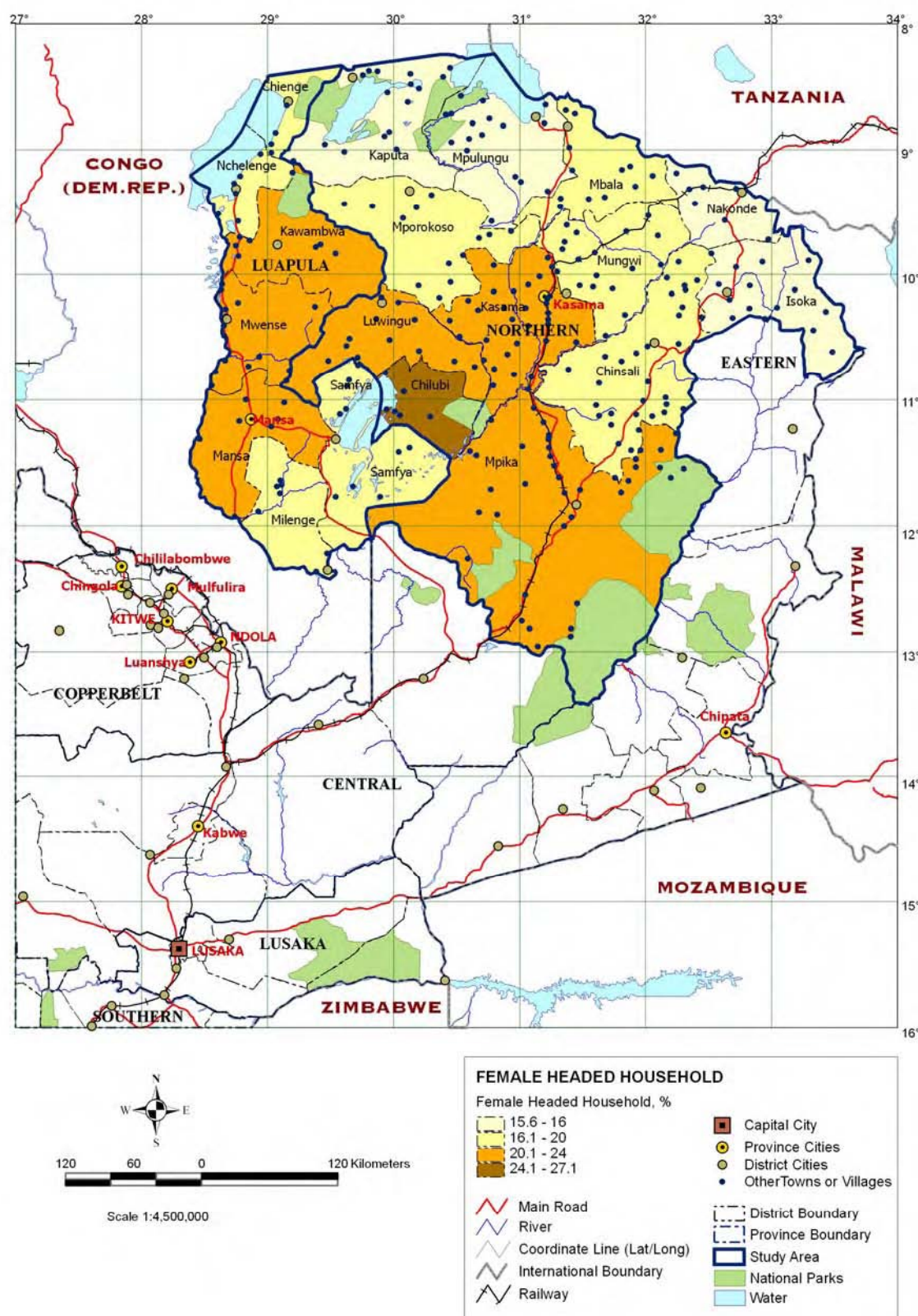
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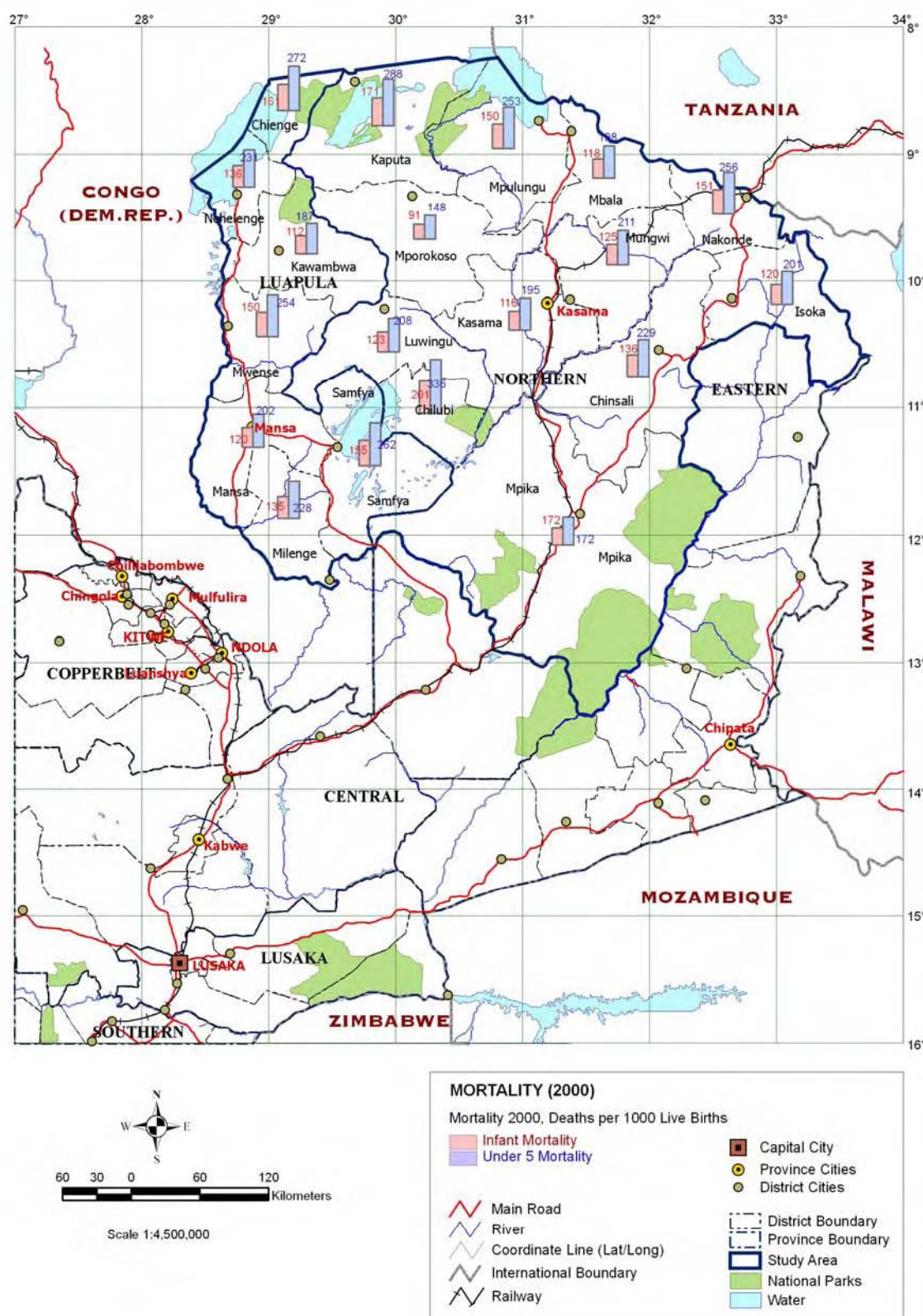
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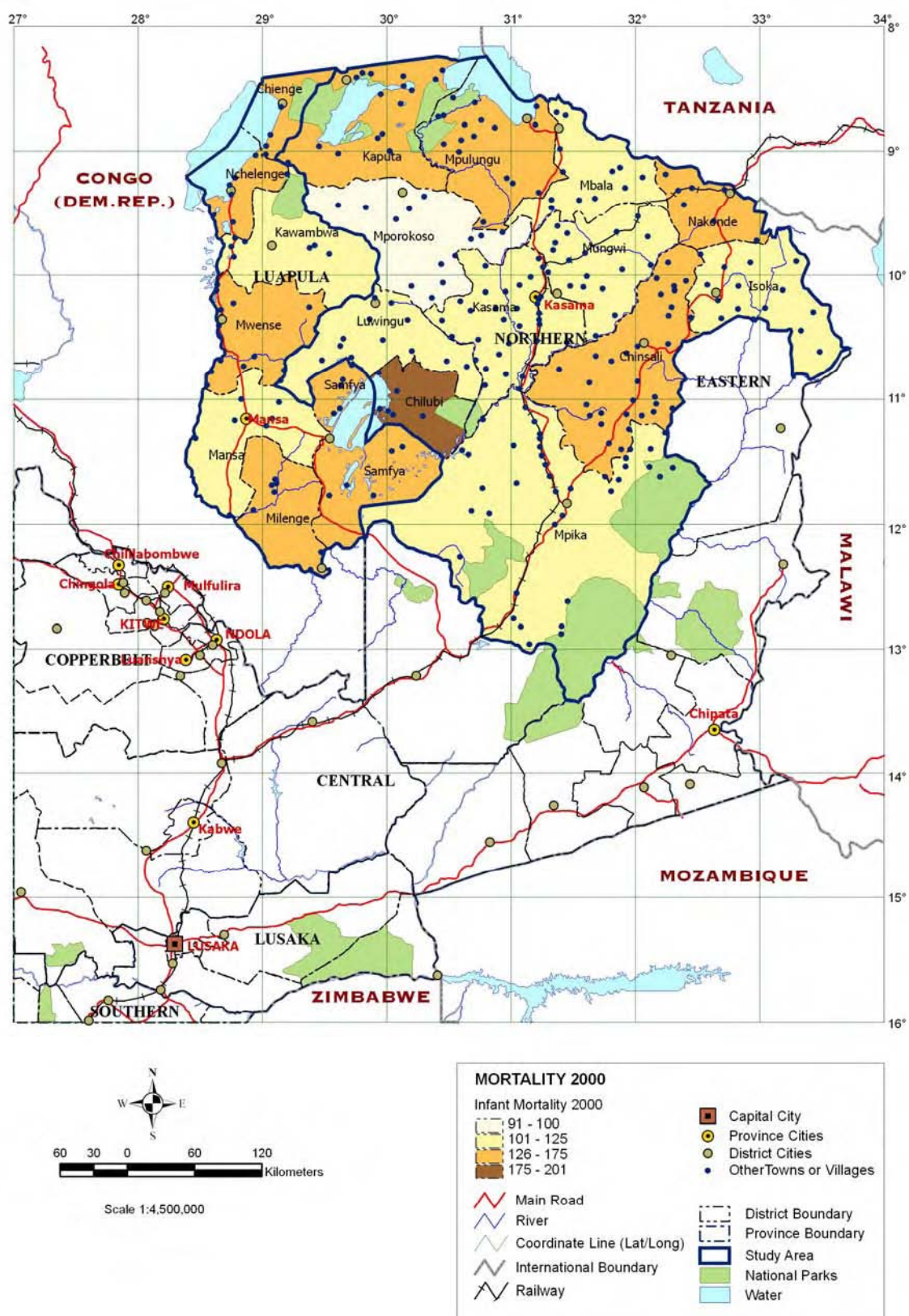
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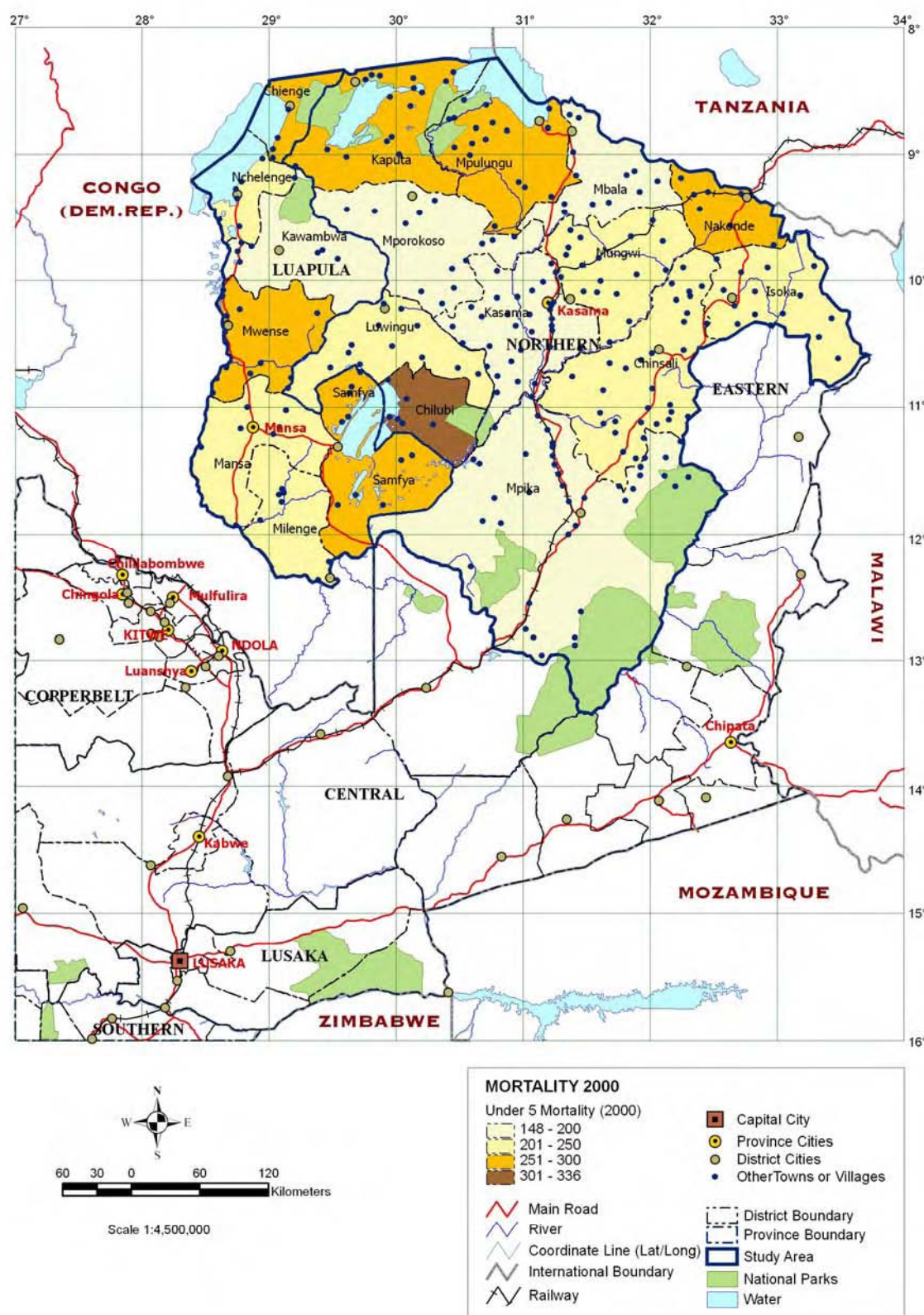
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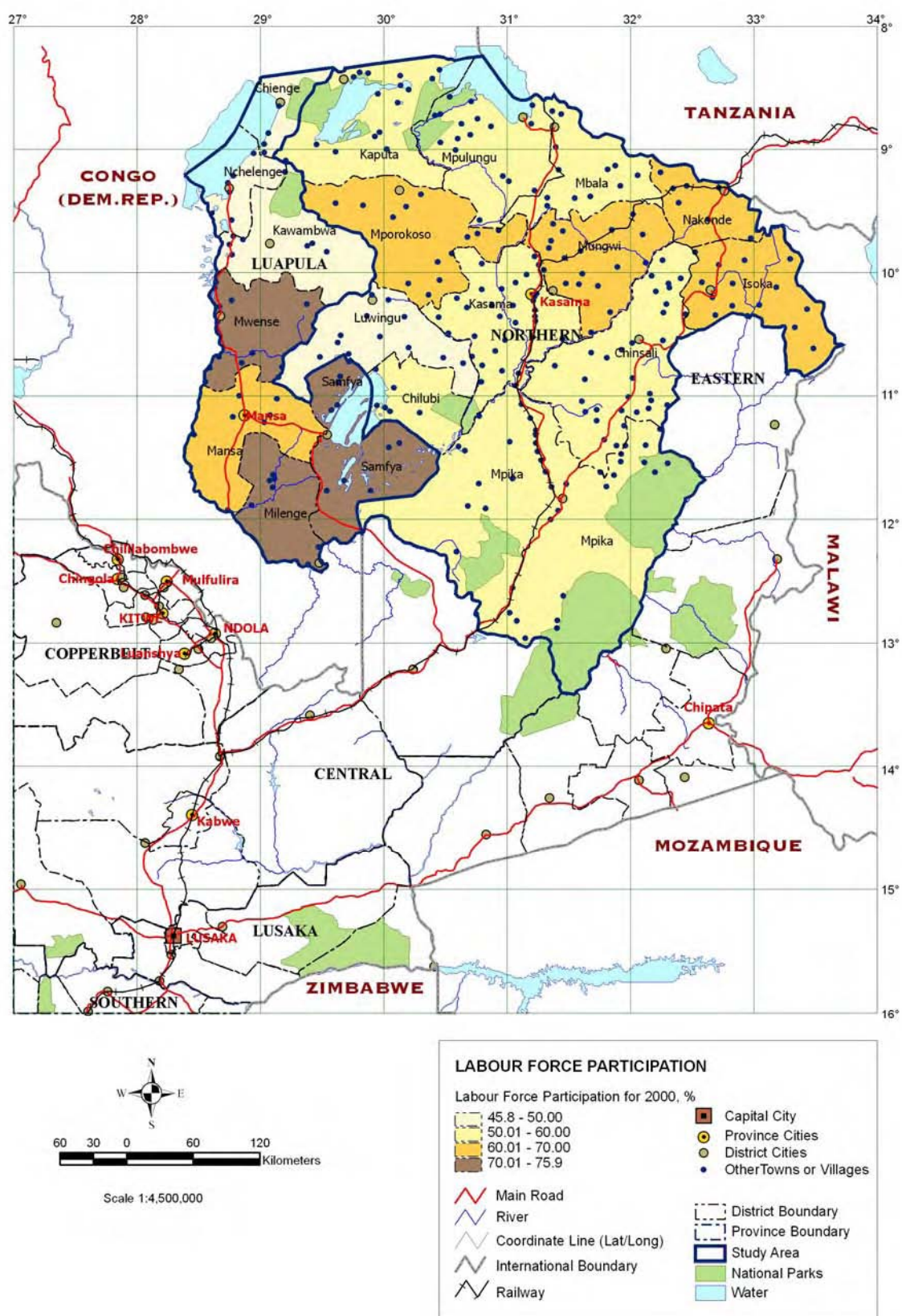
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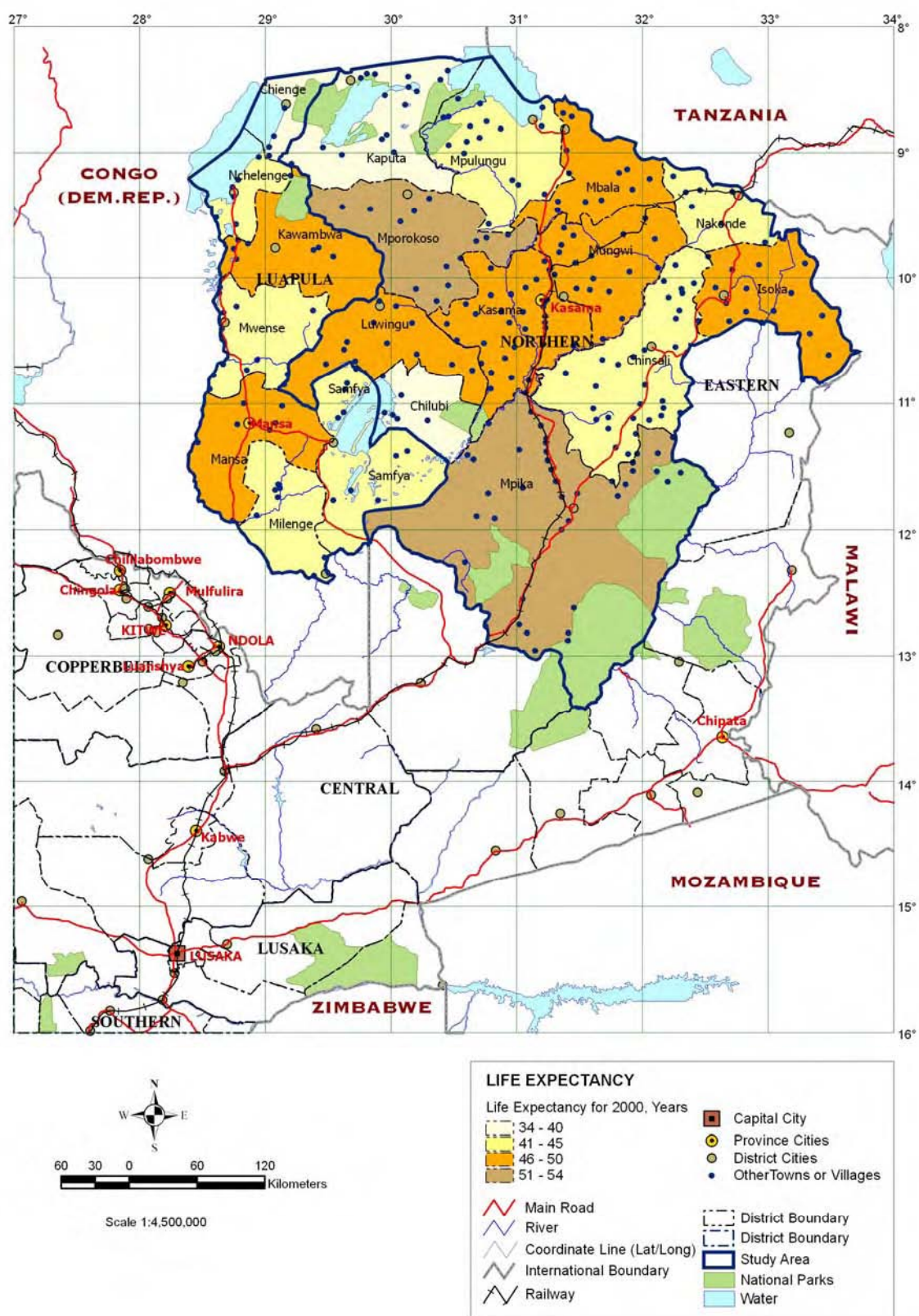
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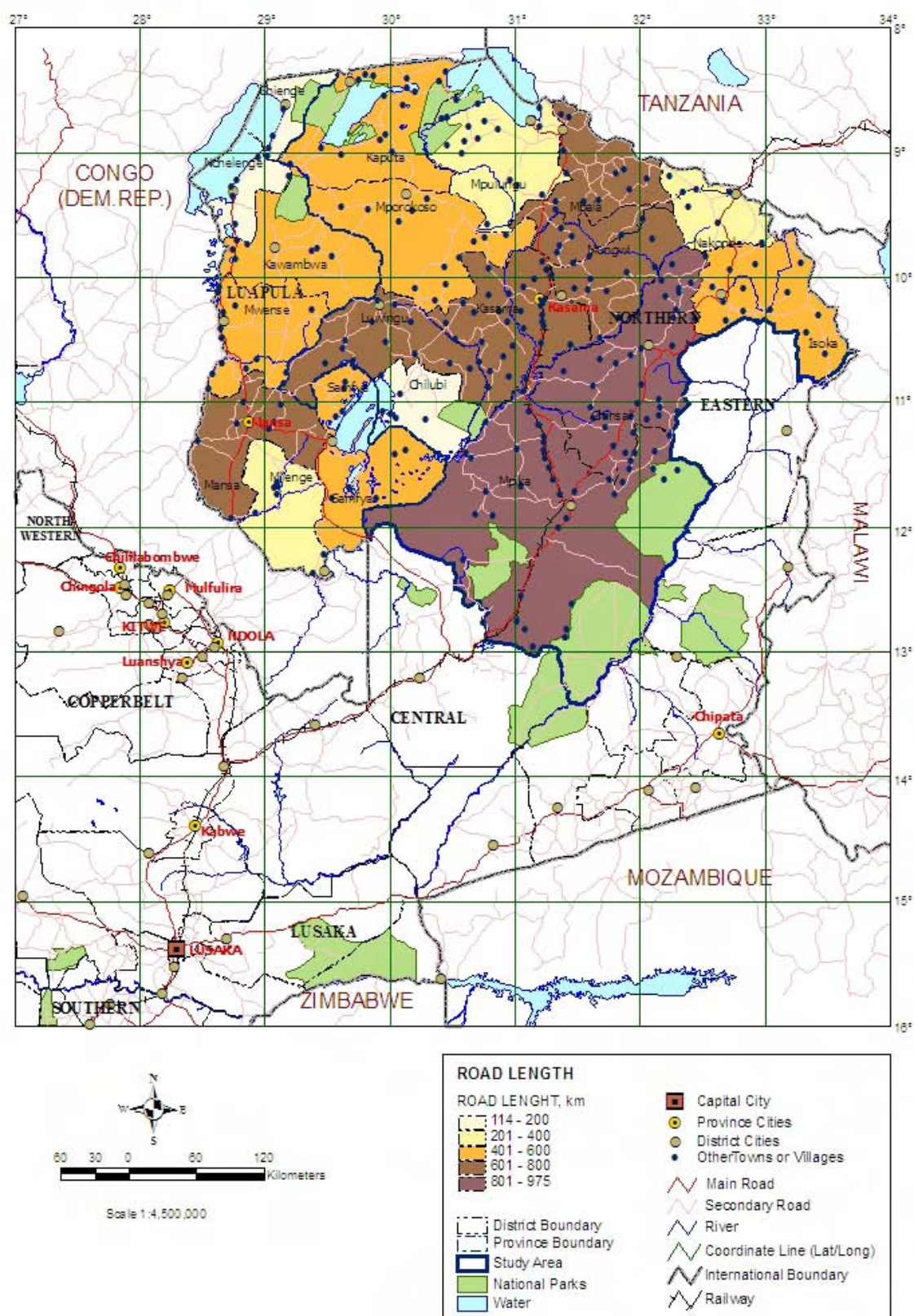
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