

11.3.3 Depth of Aquifer

A depth of an aquifer is a main factor of drilling cost as an initial cost of production well. Therefore the depth of each aquifer from the ground surface was selected as one of the indices for the evaluation of aquifers. Fig.11.3-4 and 5 show the distribution of the depth of the Auob and Nossob Aquifer. The Kalahari Aquifer, it is regarded as 0m although the aquifer, it is covered by thin surface soil or sand dune.

The depth of both aquifers becomes deeper to the eastern part of the basin. The bluish colored area showing the depth of more than 300m is spreading widely in the case of the Nossob Aquifer (Fig.5.3-5).

11.3.4 Specific Yield

The specific yield (or capacity) of the aquifer that was evaluated from pumping test was chosen as an index of productivity of aquifer. As shown in Fig.11.3-6 to 8, there is no denying that the distribution of the specific yield of each aquifers is considerably broad. Although appropriate data from pumping tests is limited to the results of JICA test boreholes, it is possible to grasp the general tendency from that.

It is clear that the most superior aquifer in terms of the specific yield is the Auob Aquifer and the most inferior aquifer is the Nossob Aquifer.

As for the Auob Aquifer, the specific yield in the western part of the basin around Stampriet is higher than the eastern part of it. Unexpectedly the specific yield of the Kalahari Aquifer is lower.

On the other hand, the distribution pattern of it for the Nossob Aquifer is much different from them. The yield in the southwestern area of the basin or Stampriet area is worse but it is getting better towards the Aminius area.

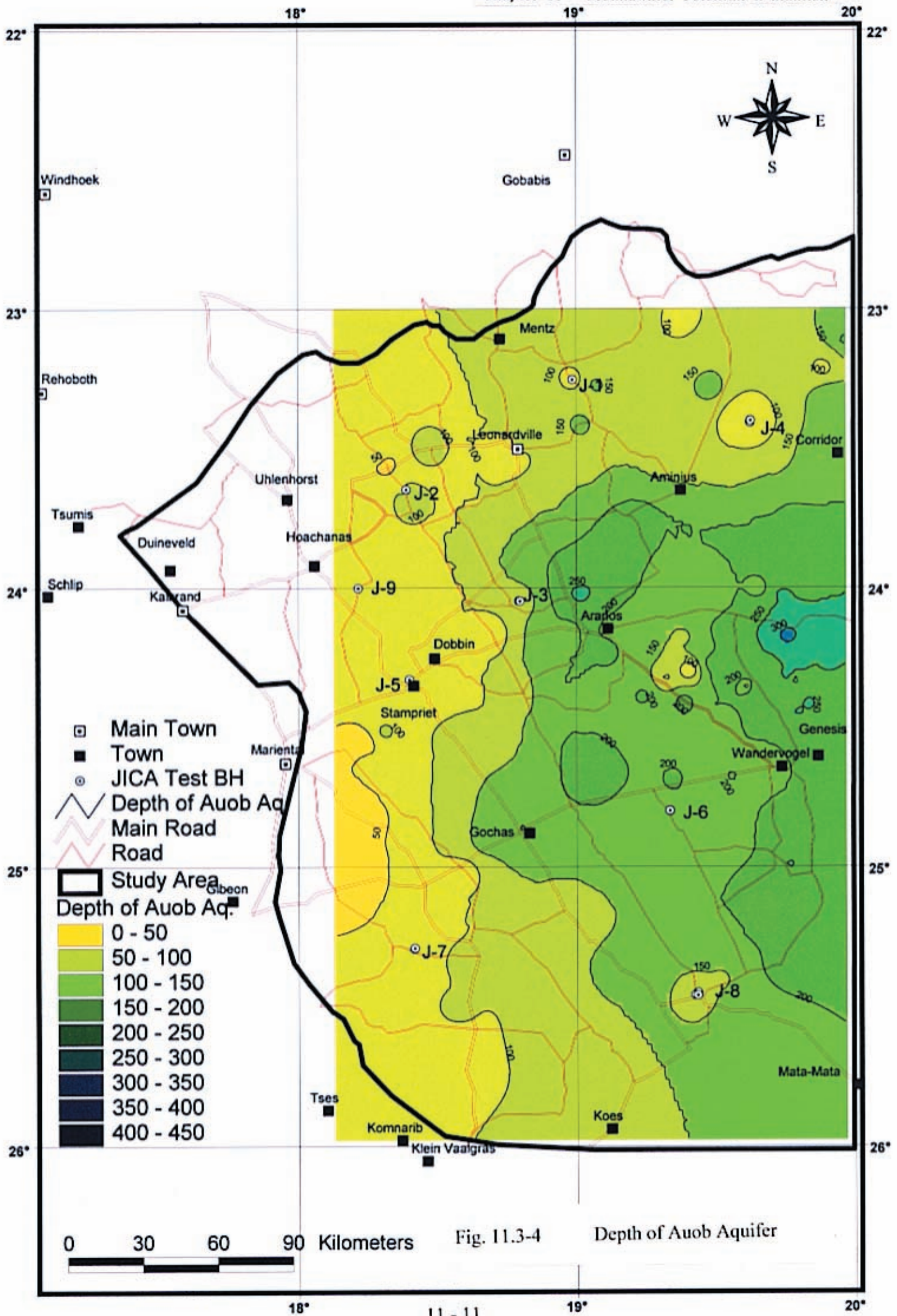


Fig. 11.3-4

Depth of Auob Aquifer

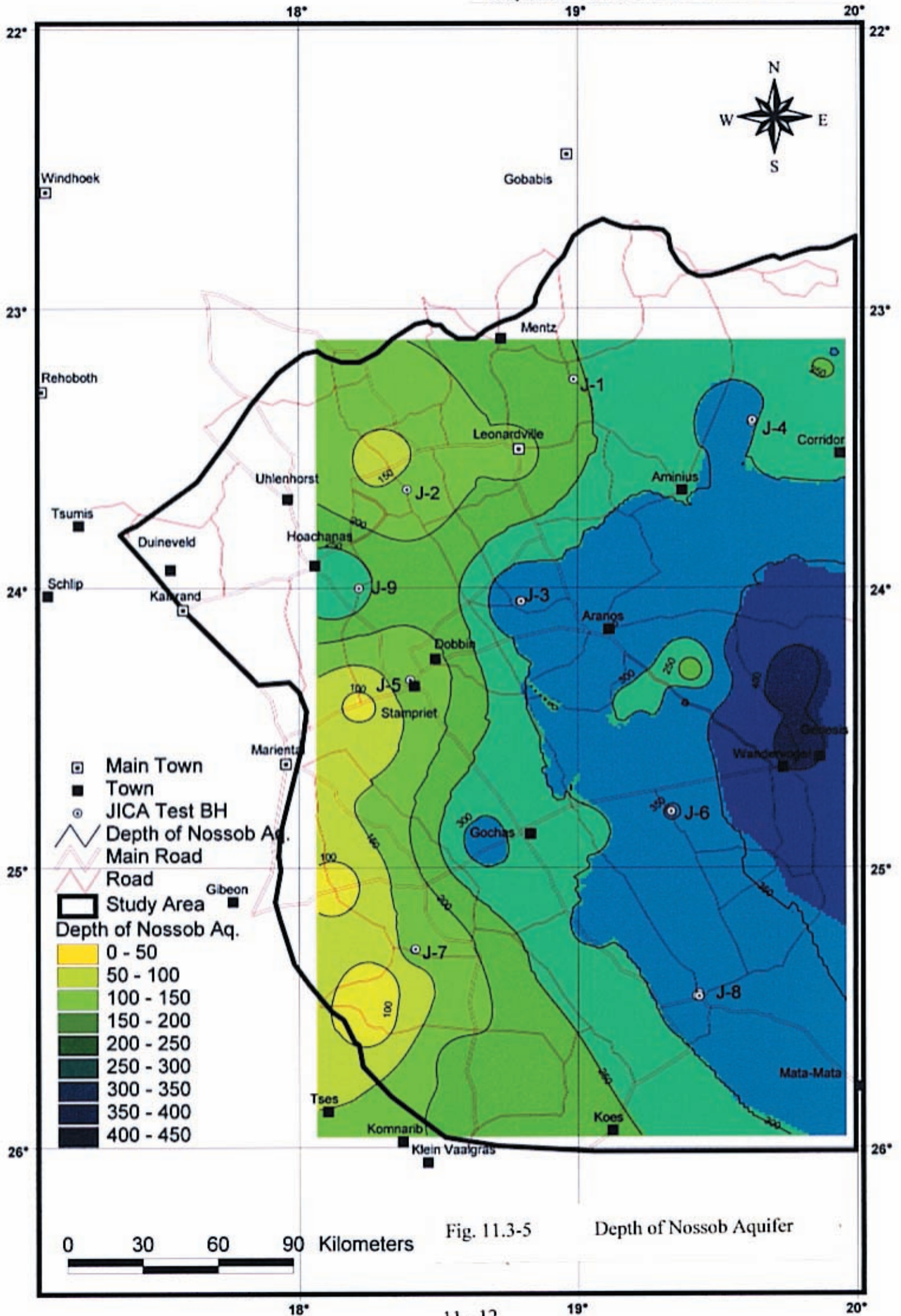


Fig. 11.3-5

Depth of Nossob Aquifer