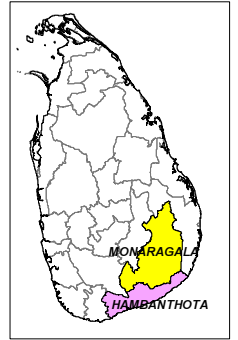
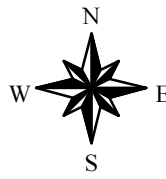


Classification Matrix  
for Groundwater Resources Evaluation

			Estimated Yield (liters/min)		
			100 <	50 - 100	< 50
EC ( $\mu\text{S/cm}$ )	Allotment Points		Good	Fair	Poor
			3	2	1
< 750	Good	2	6	4	2
750 - 3500	Fair	1	3	2	1
3500 <	Poor	0	0	0	0
Weighting					



Evaluation of Groundwater Resources

- 6 Very Good
- 4 Good
- 3 Good
- 2 Fair
- 1 Moderately Fair
- 0 Poor

Explanation of Hydrogeological Symbols

- JICA Test Wells

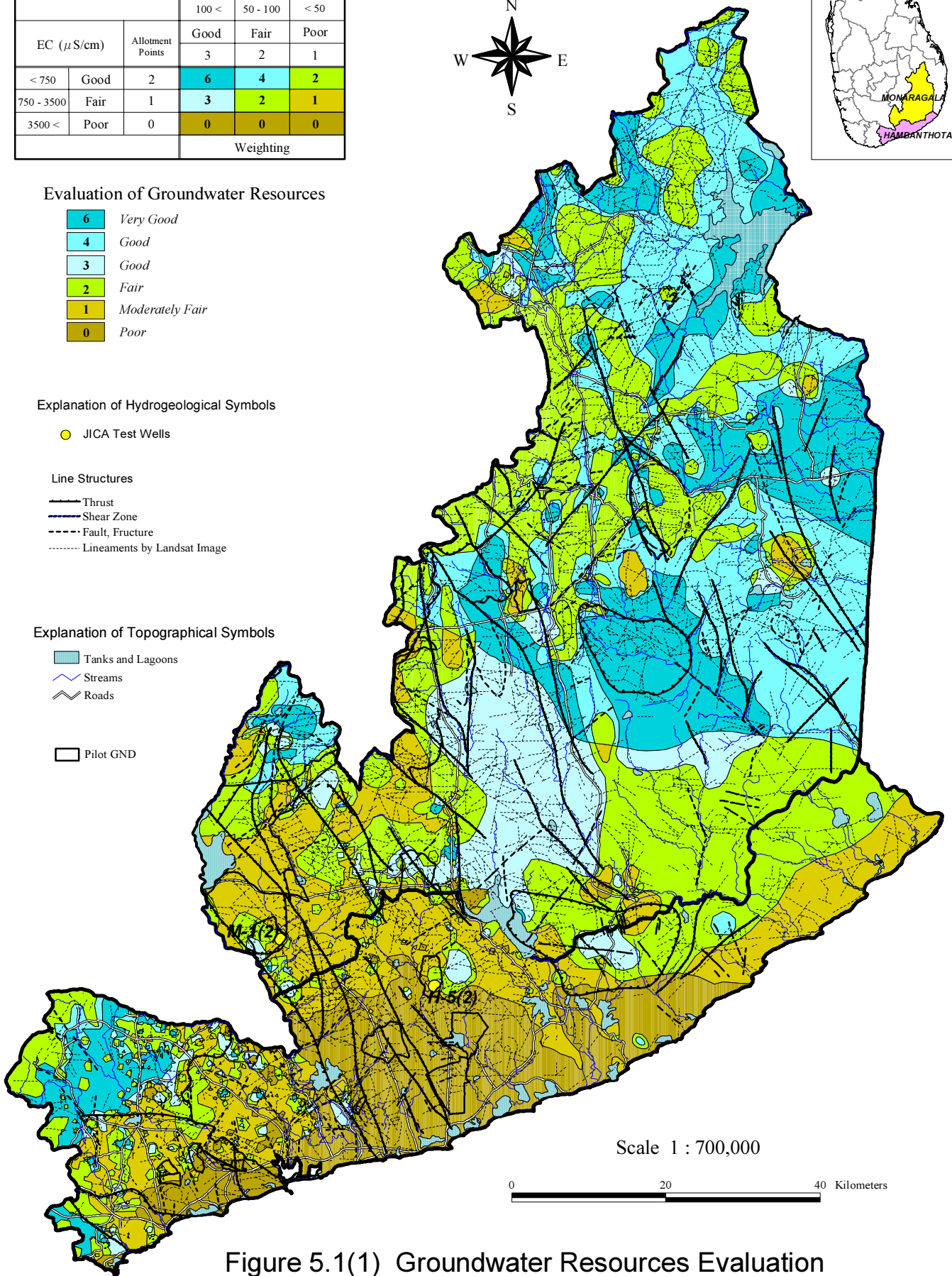
Line Structures

- Thrust
- Shear Zone
- Fault, Fracture
- Lineaments by Landsat Image

Explanation of Topographical Symbols

- Tanks and Lagoons
- Streams
- Roads

- Pilot GND



Scale 1 : 700,000

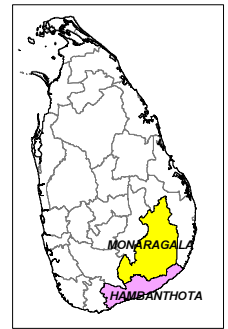
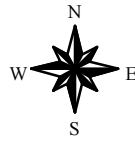


Figure 5.1(1) Groundwater Resources Evaluation

Upper Fractured Aquifer (Shallower than 70m)

Classification Matrix  
for Groundwater Resources Evaluation

		Allotment Points	Estimated Yield (liters/min)		
			100 <	50 - 100	< 50
EC ( $\mu\text{S/cm}$ )			Good	Fair	Poor
< 750	Good	2	3	2	1
750 - 3500	Fair	1	6	4	2
3500 <	Poor	0	3	2	1
			0	0	0
Weighting					



Evaluation of Groundwater Resources

- 6 Very Good
- 4 Good
- 3 Good
- 2 Fair
- 1 Moderately Fair
- 0 Poor

Explanation of Hydrogeological Symbols

- JICA Test Wells

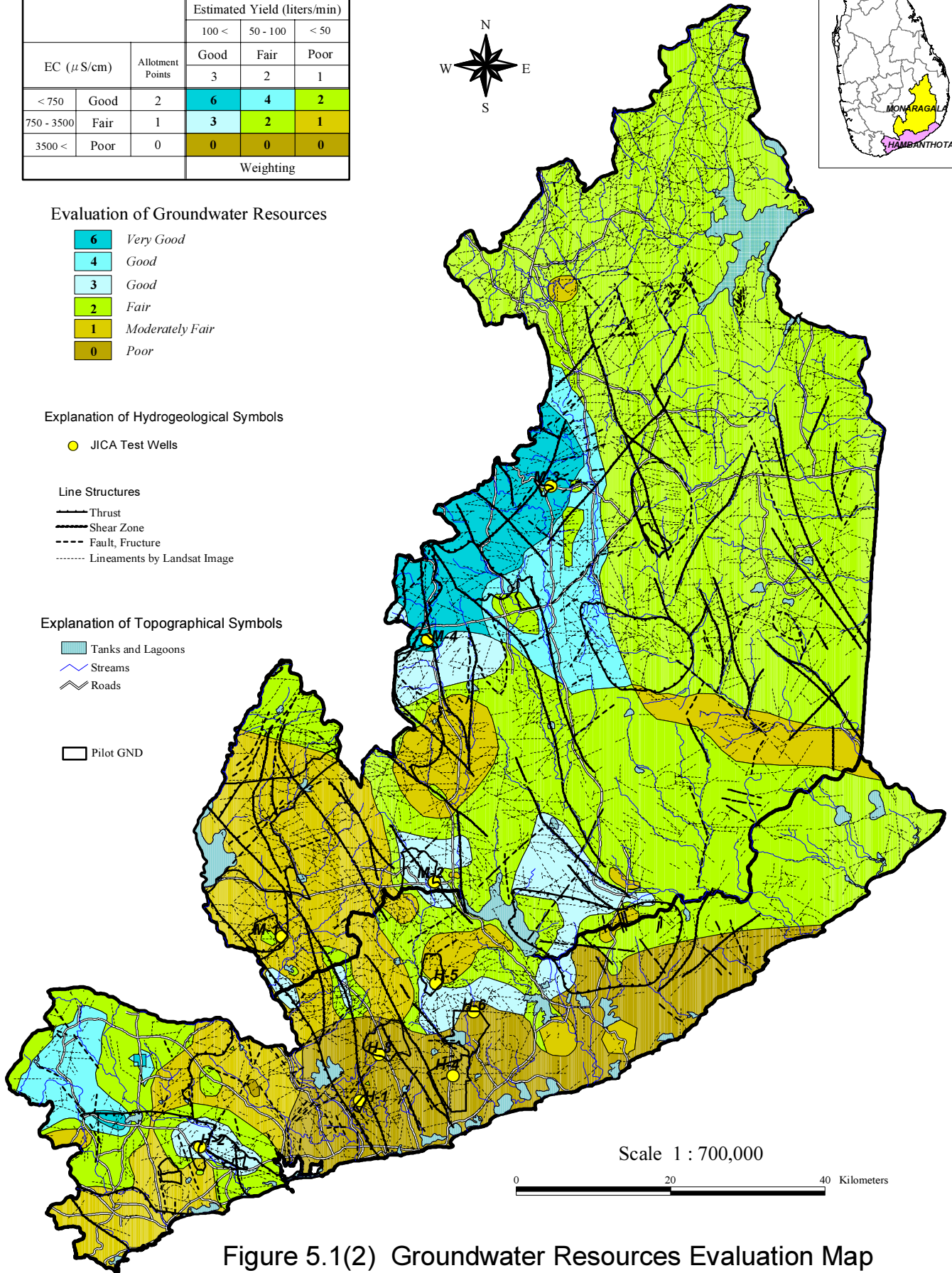
Line Structures

- Thrust
- Shear Zone
- Fault, Fracture
- Lineaments by Landsat Image

Explanation of Topographical Symbols

- Tanks and Lagoons
- Streams
- Roads

- Pilot GND



Scale 1 : 700,000

0 20 40 Kilometers

Figure 5.1(2) Groundwater Resources Evaluation Map

Lower/Deeper Fractured Aquifere (Deeper than 70m)

### 5.3 EXTRACTABLE GROUNDWATER YIELD

#### 5.3.1 EXTRACTABLE GROUNDWATER YIELD IN PILOT AREAS

Table 5.2 shows the rating and the expected extractable yield of the pilot areas.

**Table 5.2 Rating and Extractable Yield of the Pilot Areas**

		Deeper (100-200m)					Lower (70-100m)					Upper (0-70m)					Exploitable Aquifer / Yield expected						
		T	Q/s	Q	Rated Level	litres/min	T	Q/s	Q	Rated Level	litres/min	T	Q/s	Q	Rated Level	litres/min	(Well Depth)	(litres/min)	Q (m <sup>3</sup> /h)				
M1	Hambegamuwa	Moderately Fair					C					M. Fair - Fair					B	< 100	Upper(70m)	< 100	< 6		
M2	Bodagama	P	---	---	C	---	G	G	G	A	440	F	---	---	C	---	Lower (100m)	440	<b>26.4</b>				
M3	Hulandawa left	Fair					B					Fair					B	< 100	Upper-Lower(100m)	< 100	< 6		
M4	Unawatuna	Fair - Good					B					M. Fair - Fair					B-C	< 100	Upper-Lower(100m)	< 100	< 6		
M5	Yalabowa	P	F	F	C	73	G	G	G	A	610	F	G-	P	C	35	Lower (100m)	35	<b>36.6</b>				
M6	Badalkumbura	*			*	*	G	G	G	A	950	F	---	---	C	---	Lower (100m)	950	<b>57</b>				
M7	Sevanagala	P	---	---	C	---	---	---	C	---	F	G-	F	B	85	Upper (70m)	85	5.1					
H1	Keliyapura	P	---	---	Imperceptible	---	---	---	Imperceptible	---	F	F	P	C	12	Upper	Poor						
H2	Vitarandeniya	Moderately Fair					C					G-					F	P	C	20	Lower (100m)	< 50	< 3
H3	Talunna	G	G	G	A	415	---	---	---	C	---	- M. Fair			C	---	Deeper (200m)	415	<b>24.9</b>				
H4	Wediwewa	P	---	---	C	---	---	---	C	---	P	P	P	C	1.9	Poor - Imperceptible							
H5	Tammennawewa	*			*	*	G	G	G	A	432	F	F	P	C	3.5	Lower (100m)	3.5	<b>25.92</b>				
H6	Pahala Mattala	P	F	F	C	50	---	---	---	?	---	G	G	G	A	106	Upper (70m)	106	<b>6.36</b>				
H7	Siyambalagaswila	P	---	---	C	---	---	---	C	---	F	F	P	C	3	Poor							
H8	Ranna	Good					B					Poor					C	---	Lower-Deeper (200m)	< 100	< 6		

G: Good F: Fair P: Poor

A blank column; Constant discharge test could not be continued for 720 min.

\*: The well was not drilled up to the deeper aquifer.

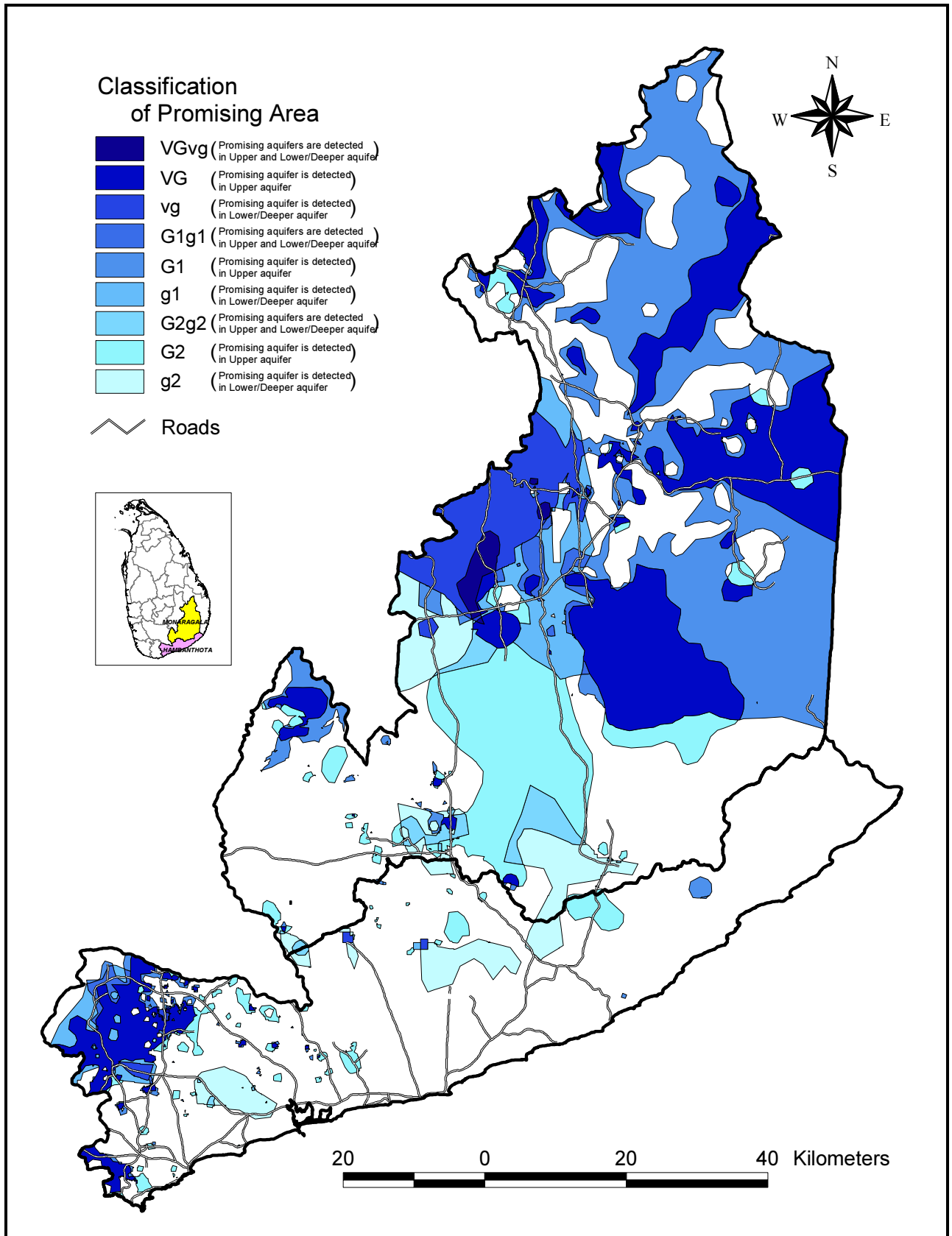
#### 5.3.2 EXTRACTABLE GROUNDWATER YIELD OF PROMISING AREA

Figure 5.2 was drawn to show the promising area for the upper fractured aquifer and for the lower/deeper fractured aquifer. The classification of the area is summarised in Table 5.3.

**Table 5.3 Classification of the Promising Area**

Area	Point (Upper)	Points (Lower/Deeper)	Promising Aquifer	Well Depth	EC	Expected Yield
VGvg	6	6	Upper/Lower/Deepr	70 (or 100 - 200)	< 750	100 <
VG	6	< 6	Upper	70	< 750	100 <
vg	< 6	6	Lower/Deeper	100 - 200	< 750	100 <
G1g1	4	4	Upper/Lower/Deepr	70 (or 100 - 200)	< 750	50 - 100
G1	4	< 4	Upper	70	< 750	50 - 100
g1	< 4	4	Lower/Deeper	100 - 200	< 750	50 - 100
G2g2	3	3	Upper/Lower/Deepr	70 (or 100 - 200)	750 - 3500	100 <
G2	3	< 3	Upper	70	750 - 3500	100 <
g2	< 3	3	Lower/Deeper	100 - 200	750 - 3500	100 <

Note: Capital letter means the evaluation of the upper aquifer, for example VG is Very Good of the upper aquifer and vg is Very Good of the lower/deeper aquifer.



**FIGURE 5.2 PROMISING AREA FOR GROUNDWATER DEVELOPMENT**

**THE STUDY ON COMPREHENSIVE GROUNDWATER RESOURCES DEVELOPMENT**

**JICA**