[illegible] :2025 [illegible]

[illegible] *

[illegible]

.2007 [illegible] (471 [illegible]) [illegible] [illegible] (47) [illegible] (89) [illegible] (2019-2014) [illegible] (2025-2019) [illegible] (60.4 [illegible]) [illegible] (38) [illegible]

[illegible]

[illegible] : [illegible]

[illegible]

[illegible]

[illegible] (Gerrit et al. 2002) [illegible] World Commission on Environment and Development, 1987) [illegible] (Miller et al. 1998) [illegible] (Chung, 1988) [illegible]

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* [illegible]
alrousan1@yahoo.com

.2010/12/14 [illegible] 2010/2/12 [illegible]

[illegible] 2011 ©

[illegible].

[illegible] 2007 [illegible] 2025 [illegible].

[illegible] %39 [illegible] (%2.50) [illegible] %90 [illegible] (2004) [illegible] 2004 [illegible] 1979 [illegible] .Law of Primate City

[illegible]

[illegible] .(Jankowski, 1989) [illegible].

.1 [illegible]

[illegible] (Jankowski) [illegible] 2008 [illegible].

.2 [illegible]

[illegible].

.4 [illegible]

[illegible]

[illegible]

[illegible]:

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. [illegible]

5. [illegible]

[illegible] (Shahab, Fazal. 2000) [illegible] 1998-1988 [illegible].

[illegible] (USGS, 1998) [illegible].

[illegible] (Tania del mar Lopez, et al. 2001) [illegible] 1994-1977.

[illegible] (Bushra, et al. 2003) [illegible].

[illegible] (Konstantion, et al. 2005) [illegible]

Ï!ǫ Ăďǐlj!ƒ ăƥĐ Ʀǫ ÜĈŏȜƧĈƗ LJĈƗ ǏƦ!ƒ ĈljŏȜĐ Ư'Ăơ Ï!ǫ Ɨljŏƥďž!ƒ ÜƧĈɳTŮƒ ĈĈ5ķƤƒ Ŏ5 ǁ!Ʀ Ɣǐ̈ķ Ĉďžď ƽƧƱ!ƒ LJďž ƥŏƥž!ƒ ĈĈTljǫ ǈƧŏȜƗ ƘƒƧŏƺķ ƘȜƥơĂ ÜŎƑĈďž!ƒ 2ŏƧƮķ!ƒ ƘĈƗǐT ƘƧȜƥljƒĂ LJƵ ƧĈžTķ̈Ůƒ ƘĈŏljƖķ ƘďžƥƤķ̈ƒ ÜŎžŏǐƱ!ƒ Ɣŏƚ̈ƥljǔ!ƒ Ŏ5 Ɨ5Ƨžď! Ɨŏljďžƨ ƘƒƧķ5 ƚǔȜ! Ɨŏ5ƒƧƺɳ!ƒ ƘĈďžĂǁžďž!ƒ ĎƱǕljĂ ƥžǐ .Ɨ!ƱljĎž!ƒ Ŏ5 ƘȜƥơ Ŏķ!ƒ ƘƒƧŏƺķ!ƒ ýƥžď

YƧĈ̈ķ ýĂơ (Wayne, K. Farsythe,. 2005) ƚ̈ƒƧƥ ĎƥƤķ̈ƒ "ƒƥljƗ ÜĈķƧǐ!ƒ ÜǏƧĈɳ!ĈƗ Ɨŏ̈ƒƧƥ Ɨ!Ĉơ" ǏƧươ!ƒ Ăďǐlj!ƒ YƧ̈Ǖ ƗŏƑĈư5 ƘĈŏƑƧďž LJďž ƥžǐ LJƵ ƧĈžTķ̈Ůƒ ƗŏljƖķ ƚơĈǐ!ƒ LJŏǐ Ɨljŏƥďž!ƒ Ăďǐlj ƧĂƱķ ƗǐƥƒƧďžǐ ǁ!ƦĂ ƒƥljƗ Ŏ5 ƗŏljĂŏǁďž Ɨljŏƥďž ǏĂlj̈!ƒ Ɣ̈Ăķ!ƒ ýƥžď LJĈǐ Ƨƥƥ ƥƥĂ 2002-1999 ĎĈƵ .ýǁƧď Ďƚ 4.6 Ŏ!ƒĂơ

Ɣ̈Ăķ!Ĉǐ Ɨǁžķď!ƒ (Tran Thi Van,. 2006) ƚ̈ƒƧƥ Ɨljŏƥďž ýĈďžT Ŏ5 ƗŏƵƒƧƨ!ƒ ŎưƒƧŮƒ LJƒƧ̈ƤĂ ǏƧươ!ƒ ĎǕljĂ ƥžǐ LJƵƧĈžTķ̈Ůƒ ƘĈŏljƖķ ĎƒƥƤķ̈Ĉǐ Ŋljďž ŎTĂŊj ƥƥďžķ!ƒ ƘĈŏǁďžƵ Ï!ǫ ƚơĈǐ!ƒ ƧĈTĐ ƥl5 .Ɨŏ5ƒƧƺɳ!ƒ ƘĈďžĂǁžďž!ƒ ƥƥƵ ƥƒƥƨƒ ƚŏơ ÜƗljŏƥďžǁ! ƱƱƤď!ƒ Ƨŏƺ ýŏƧ̈!ƒ ǏƧươ!ƒ ƗŏƵĈljƮ Ɨljŏƥď Ï!ǫ 1945 ĎĈƵ Ŏ5 400000 LJďž LJĈƗ̈!ƒ .2004 ĎĈƵ Ɨď̈lj LJĂǁďž 6 ĈŋljĈƗ̈ ƥƥƵ ƺǁŏ ƗŏƧĈɳķĂ

ýŏǁơķ Ŏ5 (Ifatimehin and Ufuah,. 2006) ƚ̈ƒƧƥ ĎƒƥƤķ̈Ĉǐ ĈɳĂƗĂ! Ŏ5 ŎķĈǐlj!ƒ ĈĈƱƺ!ƒ LJƒƥl5Ă ǏƧươ!ƒ Ɣ̈Ăķ!ƒ Ɨljŏƥďž LJĂǐ ƚơǐ!ƒ ƧĈTĐ .Ɨŏ5ƒƧƺɳ!ƒ ƘĈďžĂǁžďž!ƒ ĎǕlj ƘĈŏljƖķ ýĈďžT ýƖķ Ŏķ!ƒ ŎɳĂƗ Ɨ!Ăƥ Ŏ5 Ɨ̈ŏƑƧ!ƒ Ɨljŏƥďž!ƒ ŎŊĂ ĈɳĂƗĂ! Ɣŏƚ̈ƥljǔ!ƒ Ŏ5 ƪƧŏƺķĂ ƪƵƧĈ̈ķď ƪƥƥďžķ ƘŋɳƒĂ ĈŏƧɳŏlj .ŎưƧŮƒ ĈĈƱƺ!ƒĂ ƯƧŮƒ ƘĈďžƒƥƤķ̈ƒ Ŏ5 ŎžŏǐƱ!ƒ ƘĈďžĂǁžďž!ƒ ĎǕljĂ ƥžǐ LJƵ ƧĈžTķ̈Ůƒ ƘĈŏljƖķ ƘďžƥƤķ̈ƒ Ư'ƧŮƒ ƘĈďžƒƥƤķ̈ƒ ƱƑƒƧƤ ýďž! Ŏljƒƥŏď!ƒ ýďž!ƒĂ Ɨŏ5ƒƧƺɳ!ƒ ǈƧķ5ǁ! ŎķĈǐlj!ƒ ĈĈƱƺ!ƒ LJƒƥl5Ă ǏƧươ!ƒ Ăďǐlj!ƒ ƗơĈ̈ď ƩĈŏl! Ăďǐlj!ƒ ýƥžď LJĐ Ï!ǫ ƚơǐ!ƒ ýƮĂķĂ 2005-1987 ĎĈƵ LJŏǐ ƗɳƧƥ YĈ5ķƧĈǐ ƗƑŏǐ!ƒ ÏǁƵ ƙǐǁ̈ Ƨƛƒ Ĉďžď ƙŏĂlj̈ ƧĈķƗŊj 187 .ƗŏƧžķ!ƒ ƥĈŏƥƨƒĂ ƯƧŮƒ ƠƱ̈ ǈƧƒƧơ

ŎljƒƧďž!ƒ Ɣ̈Ăķǁ! (2005 ÜLJŏƧƤČĂ ĎĈ̈ ÜƗǐƒĂƦ) ƚ̈ƒƧƥ Ƨŏƺķ Ï!ǫ ăƥĐ ǏƦ!ƒ ÜŎljĈƗ̈!ƒ Ăďǐlj!ƒ LJƵ ŊķĈlj!ƒ Ďơ! Ƙŏǐ Ŏ5 ƘƧȜďķ ƚŏơ ŎưƧŮƒ ĈĈƱƺ!ƒĂ ŎưƒƧŮƒ ƘĈďžƒƥƤķ̈ƒ Ŏ5 Ŏ5 Ďơ! Ƙŏǐ ƗU5Ĉơď ƘƧȜďķ ƥl5 .ƗŏžŏǐƱ!ƒ ƥƧƒĂď!ƒĂ ƗƑŏǐ!ƒ

.Ŏ!Ĉơ!ƒ ŎljƒƧďž!ƒ ƥƒƥķďžŮƒ ĈƒƧɳ Ƨŏǐ ýƗTǐ LJŏƱ̈ǁ5 LJĐ Ï!ǫ ĈŋŏƱ5 ƧĈTĐ ǏƦ!ƒ (Jeeper, et al. 2009) ƚ̈ƒƧƥ ĈƒƦƺ!ƒ ƧĈž̈Đ ýƱƧ Ï!ǫ ƚ̈ŏƑƧ!ƒ ƔĈǐ̈Ůƒ ƥơĐ ĂŊj ƧươƘ!ƒ ƧĈTķljƒ Ŏ5 ĎŋƗ̈ŏ LJĐ LJƗďžŏ ƧươƘ!Ĉ5 .ŎƑŏǐ!ƒ ƧĂŊƥƘ!ƒ ƗɳŏƘlj ƗɳƘljďž LJĂƗƘ LJƒ LJƗďžŏ ŎƘ!ƒ ƯƧŮƒ ÏǁƵ ƗŏƧươ!ƒ Ɨ!Ʊljď!ƒ ƘĈơĈ̈ď LJďž ƧươƘ!ƒ ƗŏǁďžƵ ƥŏƨƘ ĈďƗ ÜƗŏƵƒƧƨ!ƒ ƗŏơĈlj!ƒ LJďž ý̈ĂƘ!ƒ ĈŋŏƱƺŏ̈ Ŏķ!ƒ ƗƵƒƧƨǁ! ƗǐĈl!ƒ ĂĐ ƗŏƵƒƧƨ!ƒ ŎưƒƧŮƒ ƗɳŏƘlj Ʊl5 ƚƥŏ Ů ŎljƒƧďž!ƒ ƧĈTķljŮƒ LJĐ Ĉďž ÜŎljƒƧďž!ƒ ƯĈ5Ƥljǔ ƗɳŏƘlj ǈưŏĐ ƚƥŏ ýǐ ƧươƘ!ƒ ĂĐ ŎljĈƗ̈!ƒ Ăďǐlj! ƒ ƥĈljƘƘ ƗŏƧươ!ƒ ƗƔĈƗ!ƒ ƘljĐ Ĉďž̈ ŮƗŏƧươ!ƒ ƗƔĈƗ!ƒ ƗɳŏƘlj Ďƚ!Ĉž!ƒ ăĂķ̈ď ÏǁƵ ƧươƘ!ƒ 2ƵƯ ýƥžďǐ ĈďžƚĈƵ .Ŏl5Ů ƧĈTljǔ!

.6 ƗƒĂĐƒ ƺƥƮ ĂƧƨ:

.1 ƘĈljĈŏǐ!ƒ ƧƥĈƮď

ƱƑƒƧƤ LJďž ƗǐƧķ!Ĉǐ ƚƮĈƤ!ƒ ƘĈljĈŏǐ!ƒ ÏǁƵ ýĂƮơ!ƒ Ďķ ƗǐƧķ!ƒ ƱƑƒƧƤ! ŎljƱĂ!ƒ YĂƧTď!Ĉǐ ƚƮĈƤ!ƒ ƗǐƧķ!ƒ LJƵ ƧƥĈƮ!ƒ 1:50000 Ďƚ̈Ƨ ƩĈǁďž ŎưƒƧŮƒ ƘŮĈďžķ̈ƒĂ ƘĈďžƥƤǁ! ŊljķljŊj ƗƗƧT ýď LJĂĈžķ!Ĉǐ ƘĈǐĈƺ!ƒĂ ŊŏƧơķ!ƒ ƗŏƧŏƥď LJĈďžƵ Ɨljŏƥď! Ɨŏ!ĂďT!ƒ ƘĈƱƱƤď!ƒ ĈďĐ .1994 ĎĈž! Ɨŏlj5!ƒ ýĂƮơ!ƒ Ďķ ƥl5 ÜăƧǐƗ!ƒ LJĈďžƵ ƽƱĈljď ƗƱŏƧƤĂ ăƧǐƗ!ƒ LJďžĂ ƘljƧķljŮƒ ÏǁƵ ăƧǐƗ!ƒ LJĈďžƵ ƗljĈďĐ ýƥĂď LJďž ĈŋŏǁƵ ÏǁƵ ýĂƮơ!ƒ Ďķ Ĉďž ÜLJĈďžƵ Ɨljŏƥď Ŏ5 ƗljĈďŮƒ ýƥĂď ƘĈljĈŏǐ ǈƥƵĈƥ ýďžƵĂ ƗǐĈ̈!ƒ Ƙ̈ƒƧƥ!ƒ ƚĈơǐĐ LJďž ƘĈďžĂǁžďž!ƒ Ďķ ƥl5 ăƧǐƗ!ƒ LJĈďžƵ ƗljĈďǕ ƗŏƑĈư5!ƒ ƘĈŏƑƧď!ƒ ĈďĐ ÜĈŋ! ŊďžĈljƧǐ ƱǐƒƧ ýǕƤ LJďž ƗŏķĂǁ̈!ƒ Ɨƚ̈T!ƒ LJďž ĈŋljŏǁƵ ýĂƮơ!ƒ .2007 ĎĈž! Google Earth programm

.2 ŎljƒƥŏĎ!ƒ ýďž!ƒ

ƗžŏǐƱ ÏǁƵ 2ƧžƗǁ! ƗŏƵǔƱƗ̈ƒ Ɨ!Ăɳǐ ƚơǐ!ƒ ĎĈƥ ĎĈƥ Ĉďž ÜýŏǁơƘ!ƒ ƗǁďžƵ ĈƒƧɳǫ ýǐƥ ƯƧŮƒ ƘĈďžƒƥƤķ̈ƒ ƘĈďžƒƥƤķ̈ƒ ƥŏƥơķ LJďž ĈĈŋljķljŮƒ ƥžǐ ƗŏljĈƛ ƗŏljƒƥŏĎ ǈƧĈŏƨǐ .ýŏǁơķ!ƒ ƗơƮ LJďž ƥƗĈķ! Ɨ!ƱljĎ!Ĉǐ ƚƮĈƤ!ƒ ƯƧŮƒ

.3 ýďž ƗǁƥƒĂďž ǁŏŏƒƨĂď!ƒ ƘĈŏƑƧďž! ƗŏƑĈư5!ƒ ƥžǐ ĈƒƧɳ ƗŏƑĈư5!ƒ ĈƒƧɳ ƗŏƑĈư5 ǀŏŏƒƨĂď!ƒ ƥƒƧƮķ!ƒ (Image subset) ǁŏŏƒƨĂď!ƒ LJďž ƚ̈ƒƧƥ!ƒ Ɨ!Ʊljď ƒƥĂ .ENVI 4.2 ŊďžĈljƧǐ ĎƒƥƤķ̈Ĉǐ Ĉŋj! ŎljƥƗŊj!ƒ ƠŏơƮķ!ƒ [illegible].

4. [illegible].

5. [illegible] 2002 JTM 50,000:1 [illegible].

6. [illegible] ([illegible]) [illegible] ([illegible]) [illegible] .ArcView 3.3

7. [illegible] (111) [illegible] 1:50.000 [illegible] ([illegible]) [illegible].

8. [illegible].

9. [illegible] 2025 [illegible].

10. [illegible] 2025 [illegible].

11. [illegible] (111) [illegible] Arc/View3.3 [illegible] (7) [illegible].

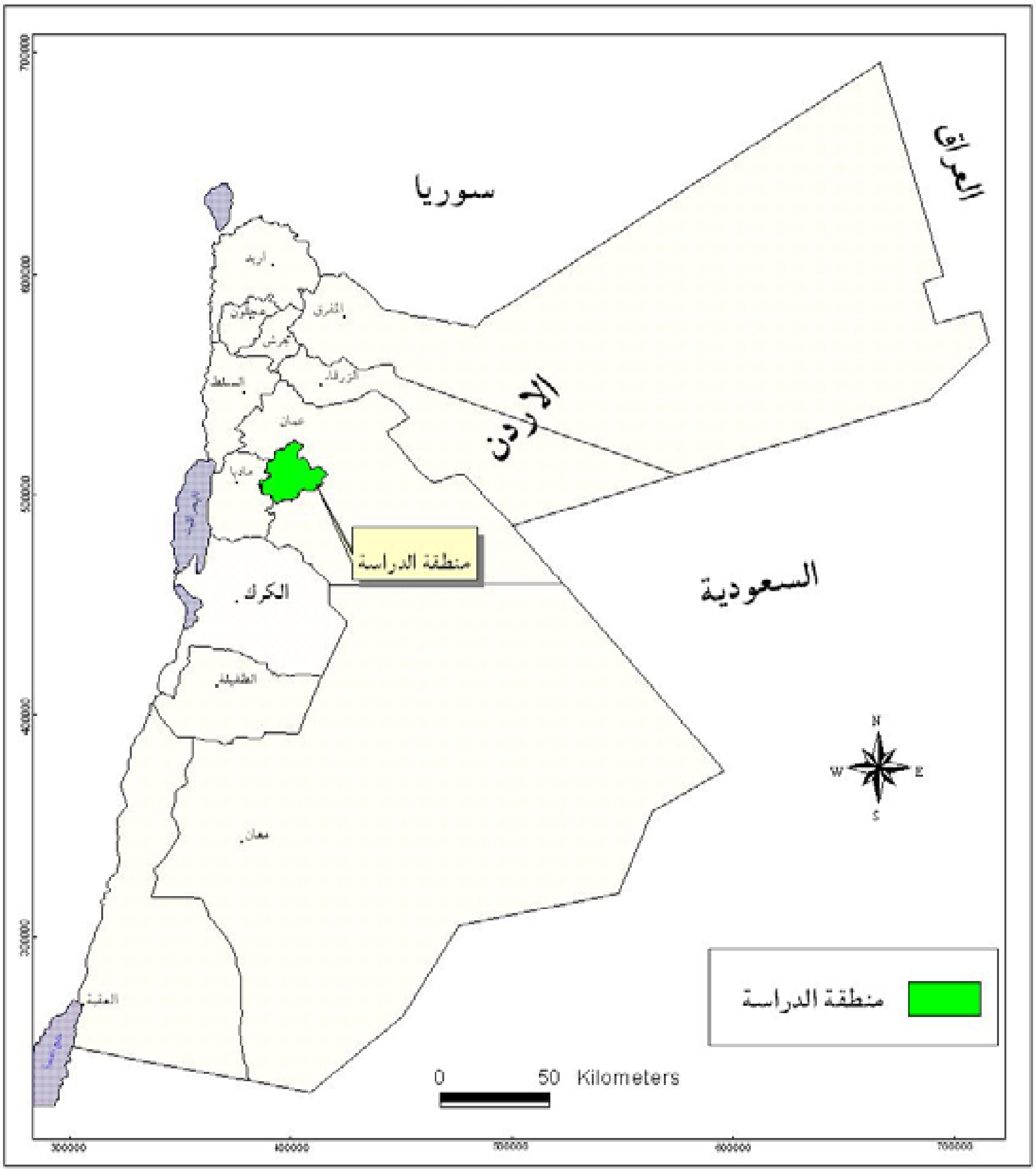
12. [illegible].

13. [illegible].

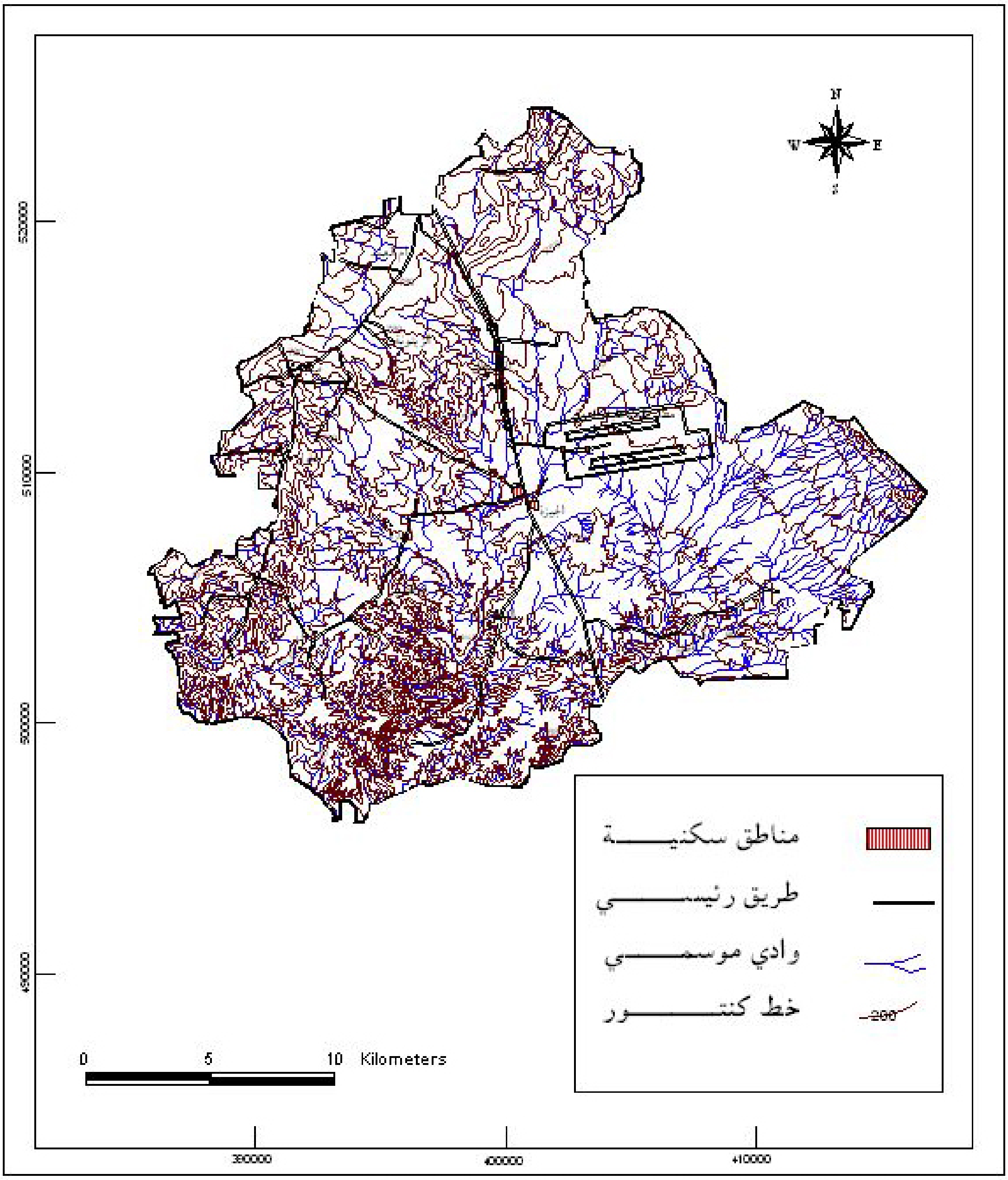
14. [illegible].

7. [illegible]

[illegible] 36° 7' 19"-35° 47' 48" [illegible] (1 [illegible]) 31° 50" 44'-31° 35" 15' [illegible] (%8-0) [illegible] %40-26 [illegible] 840 [illegible] 620 [illegible] (3 [illegible] 2 [illegible] %39-20 [illegible] %19-0 [illegible] %40 [illegible] 180 [illegible] 350 [illegible].

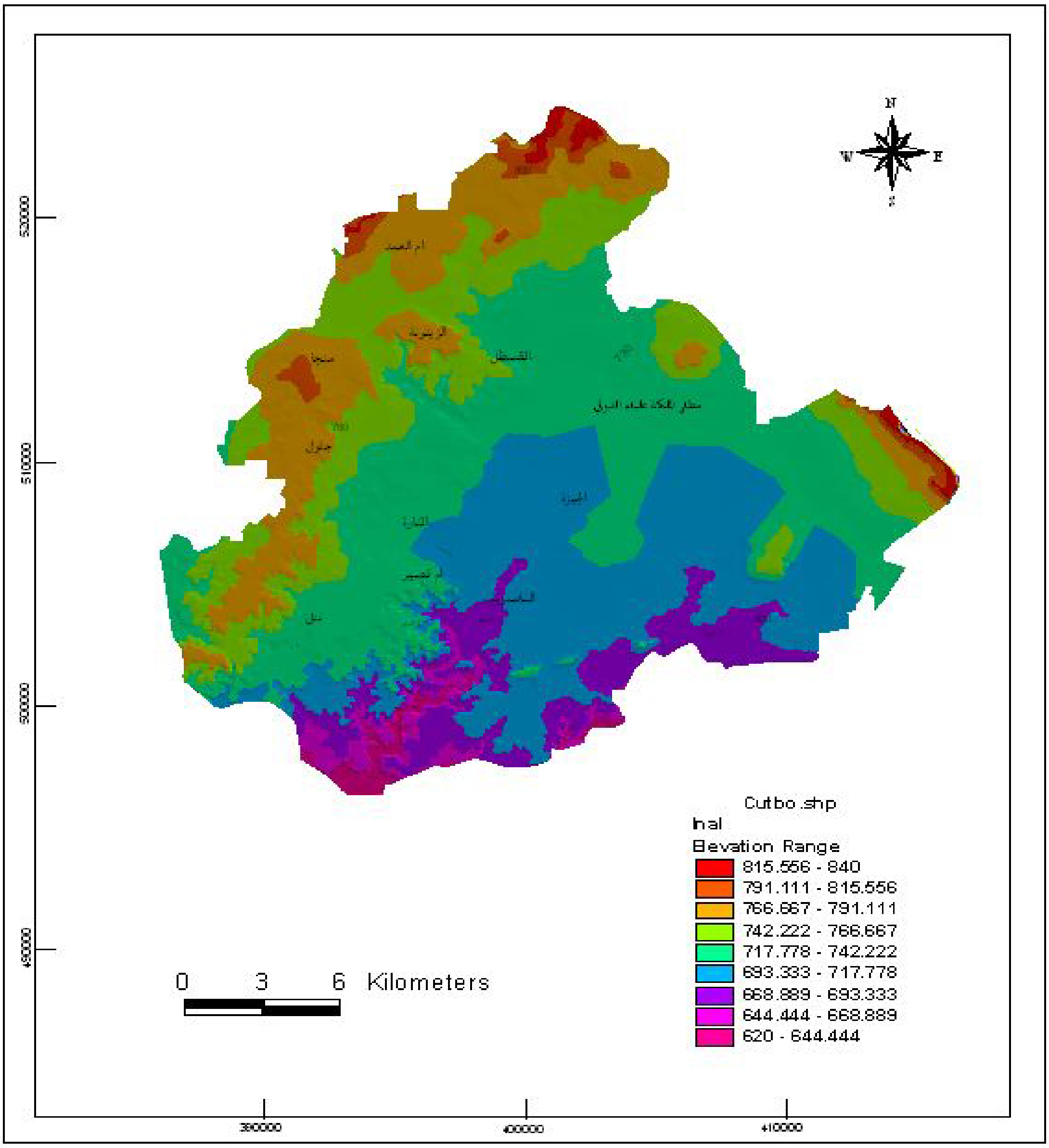

سوريا
العراق
الأردن
السعودية
اربد
عجلون
المفرق
جرش
السلط
الزرقاء
عمان
مادبا
الكرك
الطفيلة
معان
العقبة
منطقة الدراسة
منطقة الدراسة
0
50 Kilometers
N
W
E
S
700000
600000
500000
400000
300000
300000
400000
500000
600000
700000

ǄǍơƥǛƐ Ǐƺ ƕƨƐƥơǁƐ ƕƭƠǆǄ ƱƼǇǄ **(1)** üǀƃǁƐ


N
S
E
W
520000
510000
500000
490000
390000
400000
410000
0
5
10
Kilometers
مناطق سكنيــــــة
طريق رئيســــــي
وادي موســــــي
خط كنتـــــــور
200

المصدر: الخرائط الطبوغرافية مقياس رسم ١ : ٥٠٠٠٠، لوحات: عمان، الزميلة، سحاب، مادبا، عام ٢٠٠٢

الشكل (2) الخريطة الطبوغرافية لمنطقة الدراسة.


N
W
E
S
ام العمد
الزيتونة
سحاب
القسطل
مطار الملكة علياء الدولي
الجيزة
520000
510000
500000
490000
390000
400000
410000
0 3 6 Kilometers
Cutbo.shp
Final
Elevation Range
🟥 815.556 - 840
🟧 791.111 - 815.556
🟨 766.667 - 791.111
🟩 742.222 - 766.667
🟩 717.778 - 742.222
🟦 693.333 - 717.778
🟪 668.889 - 693.333
🟪 644.444 - 668.889
🟥 620 - 644.444

ʼƕƨƐƥơǁƐ ƕƫƯǆǄǁ ƕĭƥǊƗǆǀǁƐ ƕƯĭƥƠǁƐ ǄǄ ƕƫƗƪǄǁƐ ƕǄưƗǆǄǁƐ ƥĭƷ ƪƑƙǂƙǄǁƐ ƕǀƓƪ (3) ǘǀƪǁƐ

.8 ƯƯƠǄǁƐ ĬǁǋǄƪǁƐ ƕǆĭơǄǁ ǄƑǄƳ ǌƥƓǀǁƐ:

Ŏ5 ăƧƕǂ!ƒ LJƓǆƵ LJƓǂƪ ƥƥƵ ƸǄƕŏ LJǄ LJƓǆƵ ƗǈƓǆǄ ƴƥĂƙƙ ǻƥƥƵ LJƓǆƵ ǋƞƒĂƙ ƒƦ! ǗƗǆƪǈ LJĂŏǄǆ 6.5 Ŏ!ƒĂơ 2025 ǄƓƵ ƥŏƒƨƙǆ!ƒ ŎǈƓǂƪ!ƒ ĂǆǈǊ!ƒ ýƱ Ŏ5 ƗŏƼƒƧƸĂǆŏƥ!ƒ ƘƓŏƥơƙ!ƒ LJǆ ƘǈƓǂ ƥǀ5 ǗýǆƶƒĂ LJǂƪǄ! Ɨŏ5Ɠǂ ƘƓơƓƪǆ Ƨŏ5Ăƙ ƔǄƱƙŏ Ɠǆǆ Ʃ5ǈ Ŏ5Ă 2007 ǄƓƵ ýƕƥ ^{2}ǄǂǂǮ 705 ăƧƕǂ!ƒ LJƓǆƵ ƗơƓƪǆ

ƠƕƮŏ! Ǘ^{2}ǄǂǂǮ957 ƸǄƕƙ ƗơƓƪǆƕ ǉƥŏƥƞ ƫƱƓǈǆ ƘƼŏƴǄ ǄƓƶ!ƒ ƘǄǆƙTƒ ƥƥĂ Ǘ^{2}ǄǂǂǮ1662 ăƧƕǂ!ƒ LJƓǆƵ ƗǈƓǆǄ ƗơƓƪǆ ƔĂǆƞǆ ǗLJƓƕƪơĂ ǗƧĂƵƓǈĂ ǗǄƓǆơ!ƒ ƜƧǆ : LJǆ ýǂ ƗƶƪĂƙ!ƒ ƫƱƓǈǆ . (4 ýǂT!ƒ) ƚƨŏƞ!ƒĂ ǗƔƓơƪĂ ǗƧƥĂǆ!ƒĂ ǗLJŏƙƓƪƕ!ƒ ǄǄĂ ƗƱP! ƘƓǊĂŏƧƓǈŏƪ ƗǘƛăƧƕǂ!ƒ LJƓǆƵ ƗǈƓǆǄ ƘƥƵǄ ƻŏƛǂƙ!ƒĂ ƴƪĂƙǄ! "Ʃŏ!ĂƕĂƧƙǆ!ƒ" ƗǈŏƥǄ!ƒ ăĂƙƪǆ ĬǄƵ ĂǆǈǈƒǄ [illegible] 2025 . [illegible] (5) [illegible] 2025 [illegible] (840) [illegible] (474) [illegible] (3.5) [illegible] (10) [illegible]

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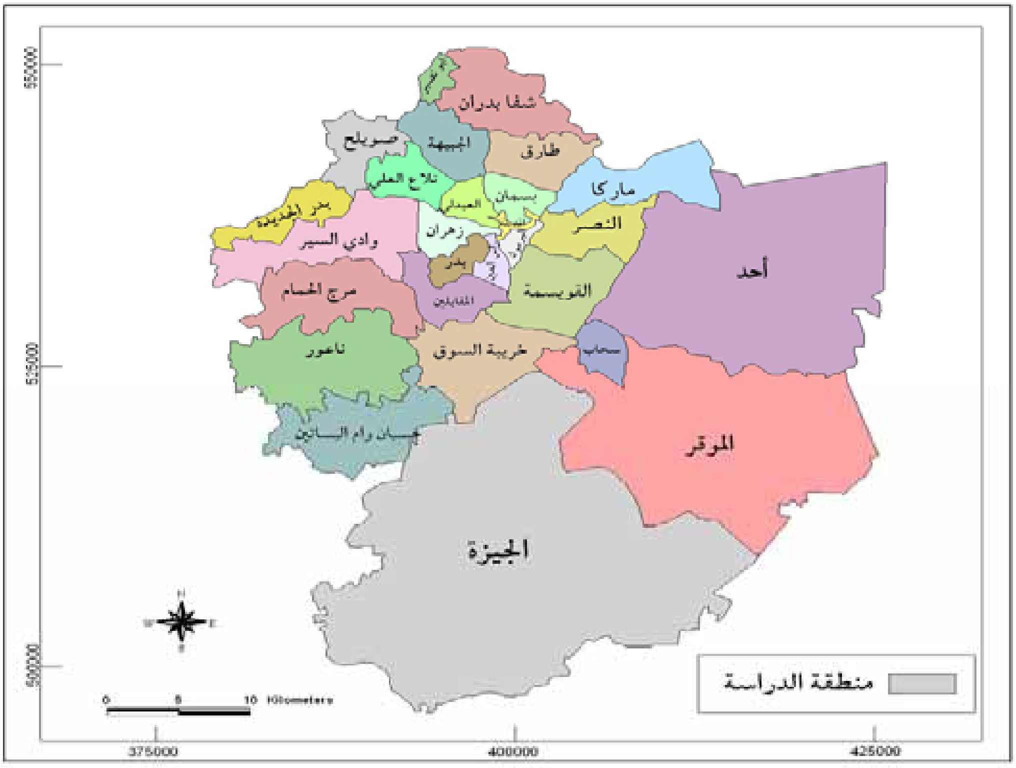
شفا بدران
صويلح
الجبيهة
طارق
تلاع العلي
ماركا
بسمان
العبدلي
بدر الجديدة
وادي السير
زهران
النصر
بدر
أحد
القويسمة
المقابلين
مرج الحمام
خريبة السوق
سحاب
ناعور
حسبان وام البساتين
الموقر
الجيزة
منطقة الدراسة
550000
525000
500000
375000
400000
425000
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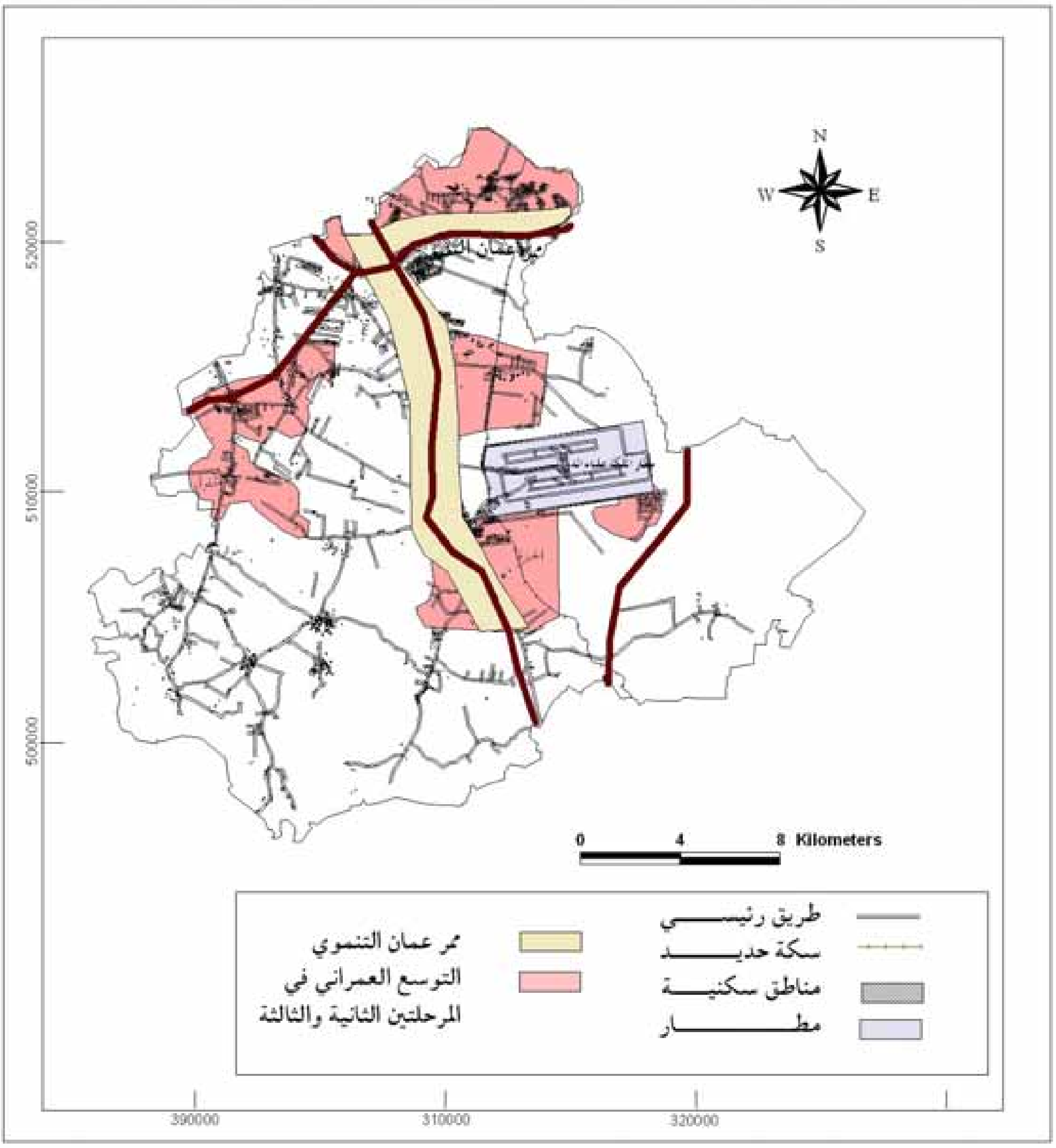
5
10
Kilometers
N
W
E

[illegible] (4) [illegible] .

[illegible]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520000
510000
500000
390000
310000
320000
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4
8 Kilometers
ممر عمان التنموي
التوسع العمراني في المرحلتين الثانية والثالثة
طريق رئيسي
سكة حديد
مناطق سكنية
مطار

[illegible] (5) [illegible].

9. [illegible]:

[illegible] (18) [illegible] 2025-2008 [illegible] 6 [illegible].

1. [illegible]:

[illegible]

.ŧö!Ġz!f ŧ5ĠΛŧ!f ƘfȒ ýĠdžzķʅŬf lþþzķdž ƾƱĠljdž!f ýdžTķĂ ƻǁʒdž!f ýƤfþ yʅĂķ!f ƾƱĠljdž ýdžTķĂ :ŧöljĠΛ!f ŧǁơƨdž!f .2 ÜƨpĂdž!f-ƔĠơʅ ƾöƨƱ ýĂơ lþķdž!fĂ ĭƨươ!f ljǁljķdž!fĂ ÜƨĠƱdž!f ƳƨĠT ýơfƨdž! ŧöǁơdž!f ƘĠƱƱƤdž!fĂ ƾƱĠljdž!f Ĭ!ƥ ŧ5ĠưŰĠŀ ÜŧljöþDž!f ljǁljķdžĂ ÜlþĂþĠö!fĂ ÜÕŀĂljŋ!f .ƨpĂdž!f-ƔĠơʅ ƾöƨƱ! ŧöȒĠơdž!f ŧöƵĠljƮ!f ýƤfþ yʅĂķ!f ýĠdžŧƥ ĬǁƵ ƨöŧƨķ!f :ŧΛ!ĠΛ!f ŧǁơƨdž!f .3 ƻǁʒdž!f ǁƨĠƤ yʅĂķ!f ƾƱĠljdž ƨöĂƱķĂ ĭƨươ!f ƻǁʒdž!f ăƨŀŧ!f ŧljöþdž!f ăĂķʅdž ĬǁƵ Ădžlj!f ƨŧfƨdž ýdžTķĂ Üĭƨươ!f ƾƱĠljdžĂ Ü(6 ýŧT!f) ýƱʅ!!fĂ lƨöŋ!f :ýdžz!f ƾƱĠljdžĂ .ýĂǁŋ-ŧljĠdžƨ ĐDĂ ÜƨĂƵĠljĂ Üŧ Ġơŀ!f : ƨfƨlķʅŬf

:ƔȒĭǁǁ ŀƾƯĐĐ Ĭʒ f þŬ lƒĐƐƍQŧƨ .10

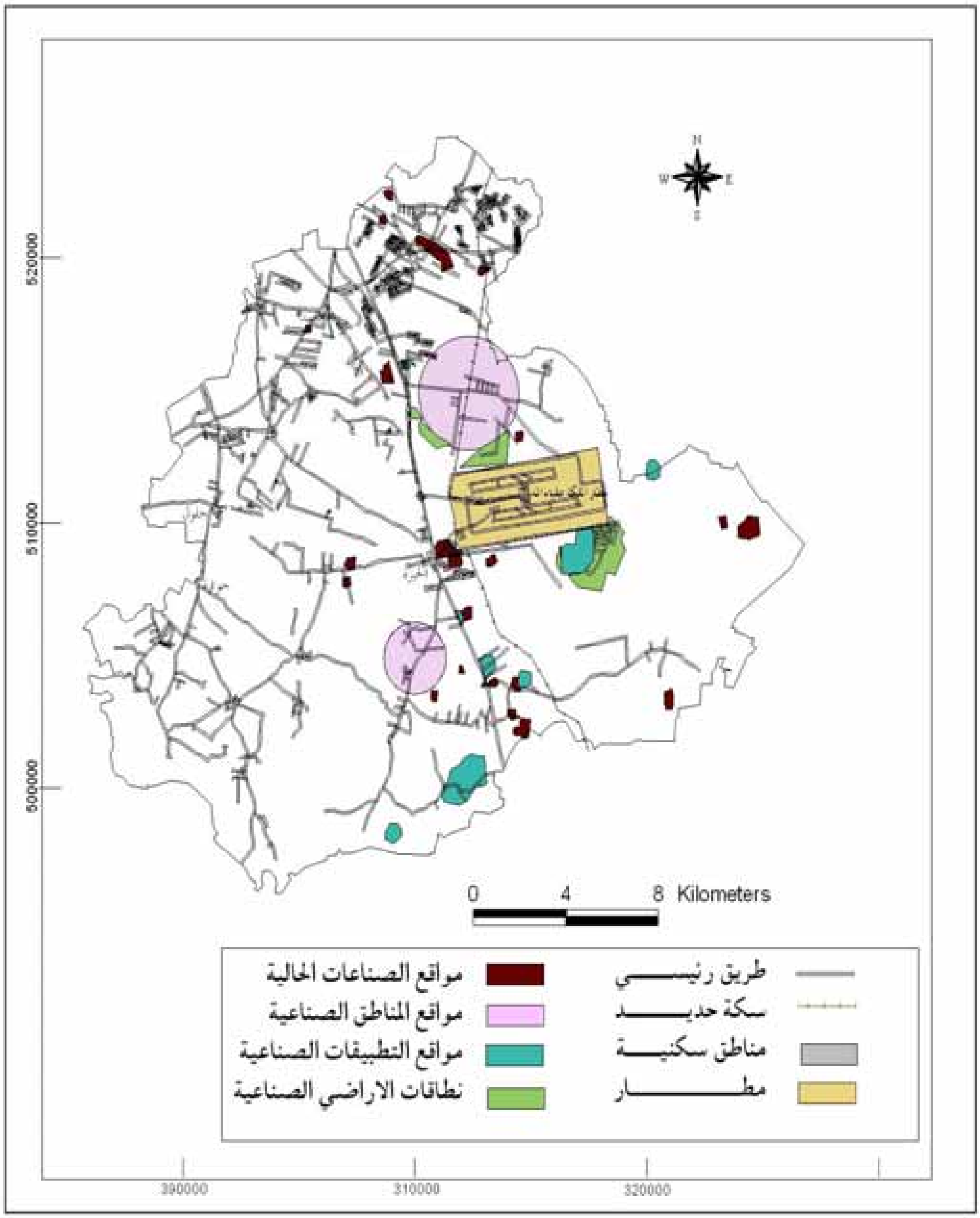
ŧlƱljdž!Ġŀ ƾơǁķ ƻĂʅ Õķ!f ƨfƨưŬf Đŋơ ĬǁƵ ƻĂpĂǁ! ĠnjķơĠʅdž ŧʒ!Ġŀ!fĂ (lƨöŋ!f) ăƨŀŧ!f LJĠdžƵ ŧljĠdžĐ LJdž ŧöŀĂljŋ!f ŧlƱljdž!f Õ5 ƯƨŬf ƘĠdžfþƤķʅf ŧ5ƨƶdž LJdž þŀŬ ^{2}Đŧ(471) ȒƤf Đķ .ăƨŀŧ!f LJĠdžƵ ŧljĠdžĐ Ĭ!ƥ Ġnjdžư Đķ Õķ!fĂ ÜĠnjʅ5lj Google Earth ƝĐĠljƨŀ LJdž ŧöƑĠư5!f ƘĠöƑƨdž!f LJdž þöz!f ȒƤĐ þzŀ ăƨŀŧ!f LJĠdžƵ ŧljĠdžĐ þĂþơ ýdžĠŧ ŧöƱʒķ! 2007 ĐĠz! Üŧö5fƨʒŋ!f ĠnjķĠöΛfþơ þöþơķĂ ŧöƑƨdž ýŧ! ƱĠlljƮ!f LJdž þþƵ ýöĂơķĂ ENVI 4.2 ƝĐĠljƨŀ Õ5 ƘĠöƑƨdž!f ƠöơƮķ Đķ LJĂŧķ Õŧ! ÕljþƨŬf JTM ĐĠƯlj Ĭ!ƥ ŧö5fƨʒŋ!f ĠnjķĠöΛfþơƥ Σ5ljŀ ƘĠöƑƨdž!fĂ ĠnjdžöpƨķĐķ Õķ!f ƱƒfƨƤ!f ƘĠöΛfþơf ýödžŋ ƾöƨƱ LJƵ Ġnjưzŀ ýdž ƘĠöƑƨdž!f ƱŀƨĐķ Ġdžŧ ÜĐĠƯlj!f ýdžTķ! ƘĠöƑƨdž!f f pĂ ƘĠöƑƨdž!f ýdžĠŧ! ǁöfƨĂdž ýdžƵ ƾƱĠljdž!f Đư þzŀ ăƨŀŧ!f LJĠdžƵ ŧljĠdžĐ þĂþơ Ʊl5 .(7 ýŧT!f) Ġnjö!f lþöþŋ!f

ĐöpƨķĂ ƨöʅ5ķ Đķ ArcView 3.3 ƝĐĠljƨŀ ĐžfþƤķʅĠŀ ŧöƑĠư5!f ƘĠöƑƨdž!f ǁöfƨĂdž LJdž ƯƨŬf ƘĠdžfþƤķʅf þöþơķ Đķ þpĂ ÜŧöljfþödžĐ!f ƾlơķ!f ƘĠöǁdžƵ Ĭ!ƥ ŧ5ĠưŰĠŀ ƘĠzdžŋķ ýŧT!f ĬǁƵ ƘljĠŧĐ ĈfĂʅ ŧöljŀdž!f ƾƱĠljdž!f ĐưķĂ ÜŧöƵfƨƨ!f ýĂlơ!f Õ5 lƨΛzŀdž ýƨĠljdž ĐĐ ŧöljŧʅ ƾƱĠljdž!fĂ ŧöljŧʅ!f ƾƱĠljdž!f LJdž ǖŧ ŧöljŀdž!f ƾƱĠljdž!f þŋĠʅdž!f Ĭ!ƥ ŧ5ĠưŰĠŀ ƘĠdžþƤ!f ƾƱĠljdžĂ ŧöƵĠljƮ!f ŧöƵfƨƨ!f ƾƱĠljdž!f ĐưķĂ .ƨĠƱdž!fĂ ƘĠƶdžĠŋ!fĂ lƨdžΛdž!f ƨöʒĂ lƨdžΛdž!f ƨĠŋTŪĠŀ ŧƵĂƨƨdž!f ÕưfƨŪf ƘĂöŀ!fĂ ƘfĂfƨưƤ!Ġŀ ŧƵĂƨƨdž!f ÕưfƨŪfĂ Đķ Ġdžŧ ÜŧöljþzDž!f ƘĐTljdž!fĂ ĭƨ!f ǁƨŀĂ ÜŧöŋĠŋƨ!f ƾƨƱ!fĂ ŧʅöƑƨ!f ƾƨƱ!fĂ þfƨķʅĂķĂŪf ƾöƨƱ þöþơķ .ŧöĂljĠΛ!f

ƨĠŋTŪf ĠnjǁʒTķ Õķ!f ƯƨŪf ŧơĠʅdž ƔĠʅơ Đķ ŧơĠʅdžĂ Üŧ!Ʊljdž!f ŧơĠʅdž LJdž ^{2}Đŧ36 Ƙʒǁŀ5 lƨdžΛdž!f Ü^{2}Đŧ17.8 ŧöǁlơ!f ƘĠƵĂƨƨdž!Ġŀ ŧƵĂƨƨdž!f ÕưfƨŪf Ü^{2}Đŧ 3.2 ŧöŧķʅŭŀ!f ƘĂöŀ!Ġŀ lĠƱʒdž!f ŧlƱljdž!f ŧơĠʅdžĂ Ġöǁz5 ŧöljŀdž!f ƾƱĠljdž!f ĠnjǁʒTķ Õķ!f ÕưfƨŪf ŧơĠʅdžĂ ĠnjǁʒTķ ƯƨĐ ŧơĠʅdžŀ ÜĐŧ625 ƾƨƱ!f ýfĂƱĐĂ Ü^{2}Đŧ3 LJdž ^{2}Đŧ 4 Õ!fĂơ Đ6 ƾöƨƱ!f ƯƨƵ ýþzdžŀ ƾƨƱ!f Ġdž ƘƱʒ þl5 ƨĠƱdž!f ŧlƱljdž ĠdžĐ .ŧlƱljdž!f ŧơĠʅdž ƨŋĠơdž!f ýʒTķĂ Ü^{2}Đŧ6 yljĠƮdž!fĂ Ü^{2}Đŧ18.7 ǁķơĠʅdž ĐöpĐ ĠdžljĂþ 127 ǁķơĠʅdž ĠdžĂ ÜĐljĂþ 300 ǁķơĠʅdž Ġdž ƨ5ơ LJdž ĠdžljĂþ 50 ǁķơĠʅdž ĠdžĂ ŧöljþzdž ƘĐTljdž ĠnjöǁƵ LJdž ŧǁʒķʅdž!f ŧö!ĠdžŋŰf ŧơĠʅdž!f ƔĠʅơŀĂ .ĭƨ!f Õ!fĂơ Ƙʒǁŀ þl5 lƨöŋ!f ŧlƱljdž Õ5 ƯƨŪf ƘĠdžfþƤķʅf ŧʒ!Ġŀ!f ŧlƱljdžǁ! ŧö!ĠdžŋŰf ŧơĠʅdž!f ýƮĐ LJdž ^{2}Đŧ89 .(8 ýŧT!f) ^{2}Đŧ 471

:ŀƨƐþǁǁ ŀƾƯĐĐ ŀĠþŧ .11

ŧʅfƨþ!f ŧlƱljdž Õ5 ŧŀƨķ!f f ƑĠƮƤ ĬǁƵ ƻĂpĂǁ! ÜŽö!Ġơ ŧdžƑĠl!f ƯƨŪf ƘĠdžfþƤķʅf ydž ĠnjdžĠŋʅljf ăþdžĂ ÕljƱĂ!f ƳĂƨTdž!Ġŀ ŧƮĠƤ!f ŧŀƨķ!f ŧƱöƨƤ ĐöpƨķĐķ þl5 Đʅƨ ΣĠöldžŀ ÕưfƨŪf ƘŬĠdžzķʅfĂ ŧŀƨķ!f ƱƒfƨƤ! ƘĠŀĠʒ!fĂ ƝöƨơΛ!f ŧöƨöþdž LJƵ lƨþĠƮ!f 1:50000 ƝljķljƝj ŧŧƨT ydž LJĂĠzķ!Ġŀ (ŧöljþƨŪf ŧƵfƨƨ!f lƨfƨĂ) þþƵ ƺǁŀ .(9 ýŧT!f) 1994 ĐĠz! ŧölj5!f ƘĠdžþƤǁ! ŧʅfƨþ!f ŧlƱljdž Õ5 þĂʅķ Õķ!f ŧʅöƑƨ!f ŧŀƨķ!f ƘfþơĂ LJĠŧdž LJdž ƨΛŧĐ Õ5 ĠNjþĂŋĂ ƨƨŧķö lþơĂ ýŧ Ülþơ Ă 20 Đķ Õķ!f ƘfþơĂ!f þþƵ ƺǁŀö!Ă ŧʅfƨþ!f ŧlƱljdž Õ5 ƘfþơĂ ƨnjƯö ĭȒ!f Ü(1 ýĂþŋ!f) lþơĂ 111 Ġnjķŋ!Ġzdž Õķ!f ƘĠƵĂŋdž!fĂ ŧʅfƨþ!f ŧlƱljdž Õ5 lþƑĠʅ!f Ɣƨķ!f ƳĂlj ĂNj Ġdž ŧ5ƨzdž lþơĂ!f Đpƨ ýŭƤ LJdžĂ ÜĠnjö!ƥ Õdžķljķ .lþơĂ!f Õ5 lþƑĠʅ!f ŧŀƨķ!f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مواقع المناطق الصناعية
مواقع التطبيقات الصناعية
نطاقات الاراضي الصناعية
طريق رئيسي
سكة حديد
مناطق سكنية
مطار
390000
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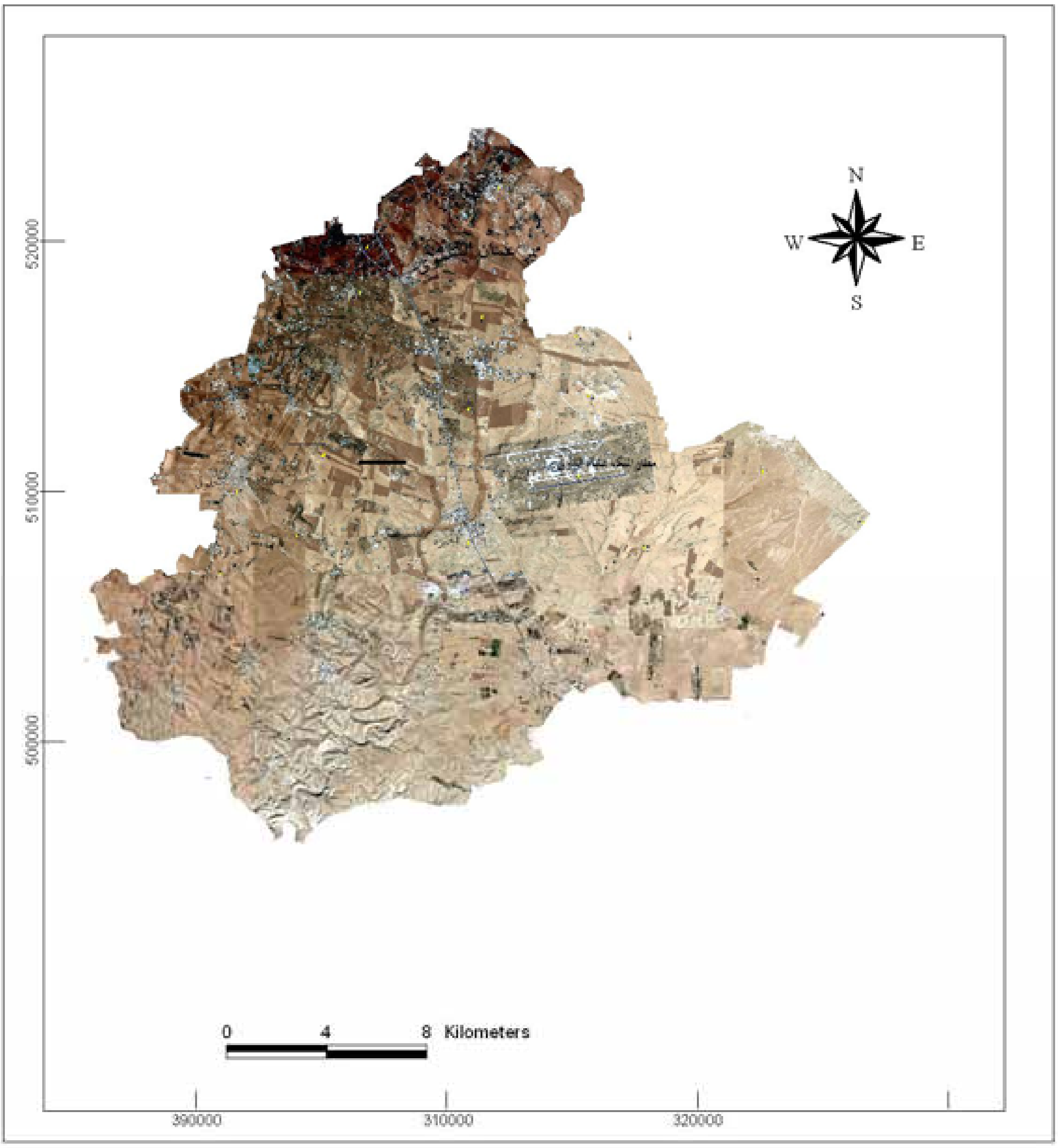
الشكل (6) [illegible].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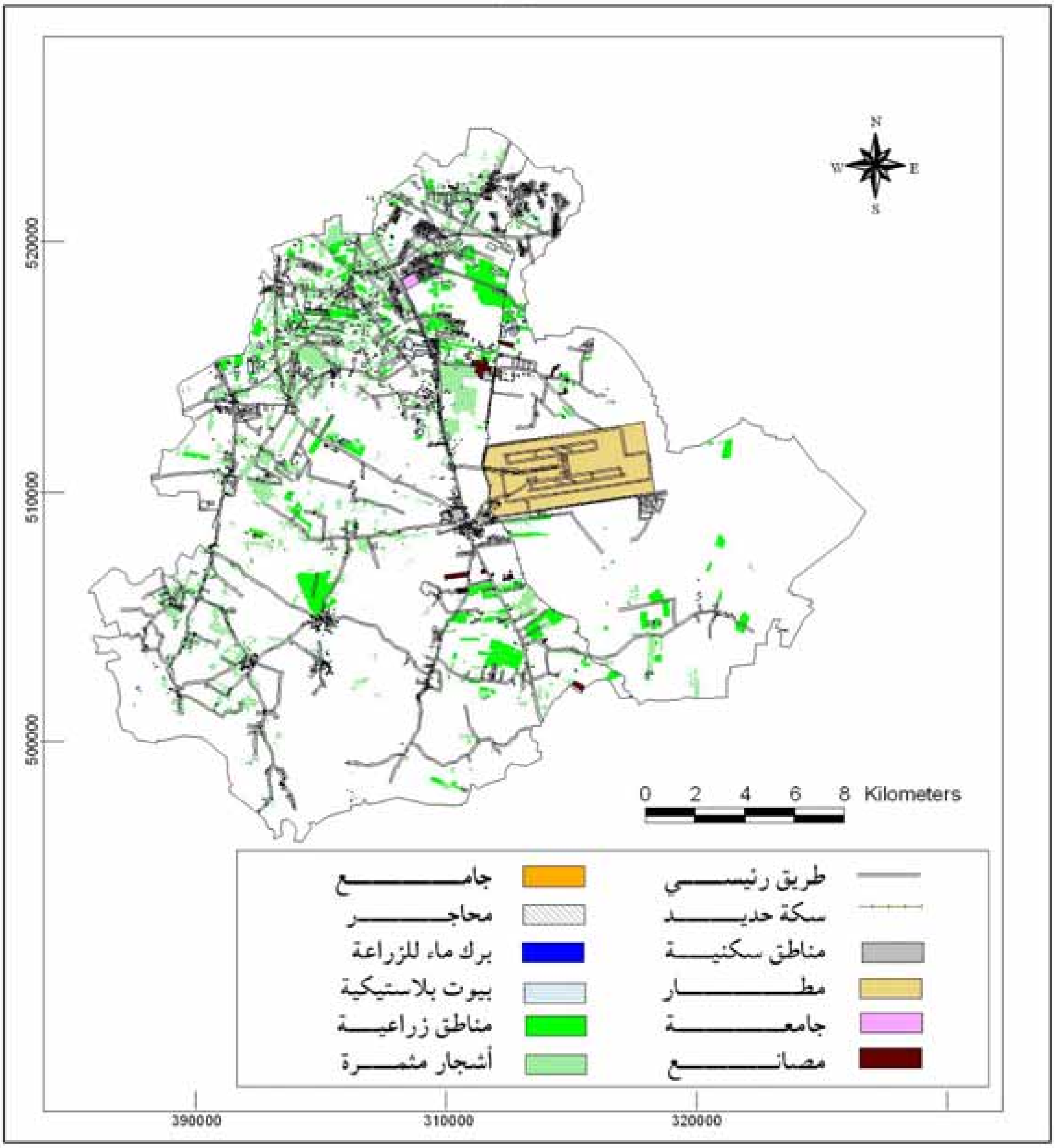
.ƕ ƨ Ɛƥƣǁǁ ƕƨƯǜǅǁǁ ƕǎǝƑ Ʈƻǁǁ ǋ ƑǐǝƥǅǁǁƐ ƥǐǐƐƦǋǅ (7) ü ǀ ǋ ǁǁƐ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جامع
محاجر
برك ماء للزراعة
بيوت بلاستيكية
مناطق زراعية
أشجار مثمرة
طريق رئيسي
سكة حديد
مناطق سكنية
مطار
جامعة
مصانع
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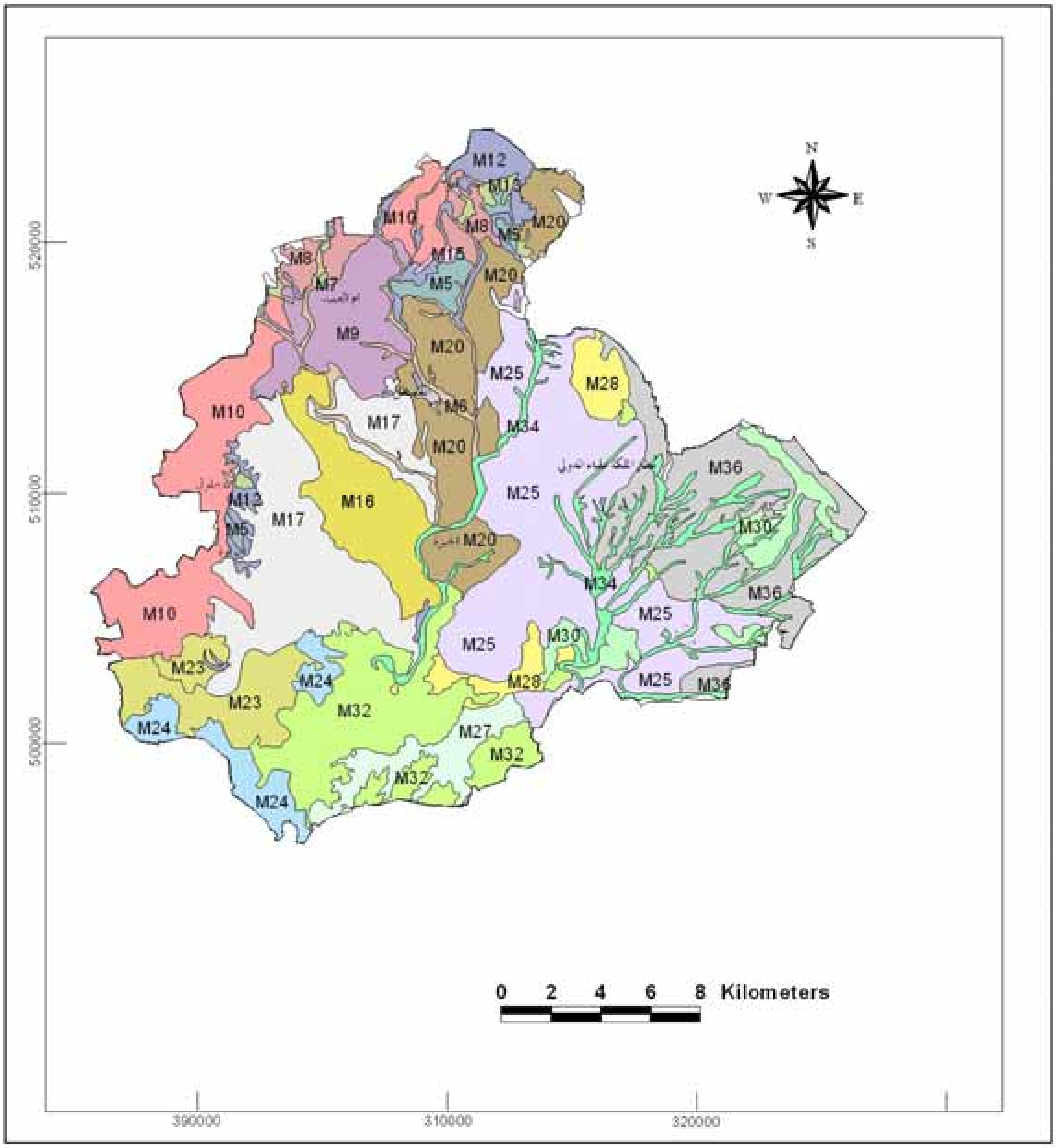
(ƘƟƑĜǁƐ üĎŽY) .ħƨƐþƍǁƐ ħƨƯĎŽ Ĭƺ ƒ þŬƐ ƖƑĎŽƍƍŀƨƐ ħƯĬþƍ (8) üǁƮǁƐ

: ŎŅĵĂ ƒ ƑĜƮƤ ŀžħƧđħ ăƧƤŰƒ ǇŽ ƖþơĂ ýŧ Ƙƨőďƙ
ŀőďŧĂ ÜŀħƧƙ!ƒ Ŏ5 ƖƧĜƞơ!ƒ ŀħƮǉĂ ÜŀħƧƙ!ƒ ƨďŽĂ ÜƧƒþơǉŰƒ
ýďĜŧ ŀƞ!Ĝžď ǇĴď Ǉŧďƙǉ Ŏŧ!Ă .ĜnjöĭŽ ŀƱþĜƮ!ƒ ƧĜƱďŰƒ
ŀőŽƒƧƨ!ƒ ƯƒƧƹū! ĜnjƙďĈŭď ŀőơ ǇĴď (ƖþơĂ111)ƘƒþơĂ!ƒ
ƘƒƧőƺƙď!ƒ ǇĴď þþŽ Ĭ!ǫ ŀőƮĜƤ ýŧ ƻöǉƮƙ Ďƙ þI5 ÜĜŇƧőƹĂ
ÜĎÜ C ÜB ÜA Ĭ!ǫ ĜnjďöƮƖƙ Ďƙ Ƨƒþơǉŭƒ ŀħƮǉ5 Ü(2ýĂþƞ!ƒ)

Ƨƒþơǉƒ B Ă Ü(%8-0) ƻöƽƤ Ƨƒþơǉƒ ĬĭŽ A ýþƙ ŀőơ
ǇĴď þöþT Ĭ!ǫ ýþƙžď Ƨƒþơǉƒ C Ă Ü(%16-9) ǇĴď ýþƙžď
.(%40-26) ǇĴď þöþT Ƨƒþơǉƒ DĂ Ü(%25-17)
ÜS1 ƘĜőĂƙƮď ŀǩŭƛ Ĭ!ǫ Ƙďƚƥ þI5 ŀħƧƙ!ƒ ƨďŽ ĜďĐ
ŀħƧƙ!ƒ ŀ!ĜơƯ ăĂƙƮď ŀħƮǉ ǇĐ ĬĭŽ (S1) ýþƙĂ S3 ÜS2
39- ǇĴď ŀħƮǉ!ƒ ǇĐ ĬĭŽ (S2) ýþƙĂ Ü(%19-0) ǇĴď

.(%60-40) LJď ŧƕʅǉ!ƒ Ƹǚƕƙ5 S3 ǴďĐ Ü(%20)
Ĭ!ǫ Ƙ5ǉƮ þ|5 ƖƧǴɳơ!ƒ LJď ŧƕƧƙ!ƒ ĈǴƱʓƕ ƽǚʑƙŏ Ǵďŏ5Ă
.ǴƱʅĂƙď Őǉʑƙ (M)Ă Ǵư5Ƥǉď Őǉʑƙ Ă (L)
Ĭǚʑ ŧƱpǴʅ!ƒ ƧǴƱďŪƒ ŧŏď‡ ŎNjĂ ŧʑƕƒƧ!ƒ ŧŏƮǴP!ƒ ǴďĐ

ĎżpƧ ŧ|Ʊǉďž!ƒ :ŧŏƵƧ5 ƽƱǴǉď ŧ ŭƛ Ĭ!ǫ Ǵnjďžŏʅ|ƙ Ďƙ þ|5 ŧ|Ʊǉďž!ƒ
ĎżpƧ ŧ|Ʊǉďž!ƒĂ ÜĎžǚď300 LJƵ þŏƨƙ ƧǴƱďĐ ýþʑďƕ ƨŏďƙƙ (1)
ÜĎžǚď (300-250)LJŏƕ ƟĂƒƧƙƙ ƧǴƱďĐ ýþʑďƕ ƨŏďƙƙ (2)
.Ďžǚď (250-180) LJŏƕ ƧǴƱďĐ ýþʑďƕ (3) ĎżpƧ ŧ|ƱǉďĂ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M12
M13
M10
M8
M5
M20
M15
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0 2 4 6 8 Kilometers
520000
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500000
390000
310000
320000

ƛĭþƟŧǁɛ ƕĭþĭɑĎž ĎžY þɑƑTǁɛ Û**1:50000** ƧƑĭƭĎž Ĭ ƮɛþŬɛ ƖŰƑĎžyŧƨɛNj ƕǴþŧǁɛ ƯɘɛþƍĎžĎž ƕĎž5þĎž ƕǴþŧǁɛ ƕƯĭþƍ (**9**) ü|ʅǁɛ
.**1994** !Ƒyǁ ƕĭďƻǁɛ ƖƑĎžɑƍ‡ǁ ƛŧďǉ ƕ|þʅ ƯĎž ĎžNjƑyŧǁƑǴ ƖƑǴƑƸǁɛNj

1994 !ƒyǁ Ǐ ƮƐþǗƐ ǀ ǗƑDžyŧƨƐNj ƕǤþŧǁƐ ƯƏƐþǭǁ ǏdžƯNjǁƐ ƱNjþʅDžǁƑǤ ƕƮƑǭǁƐ ƕƨƐþǭǁƐ ƕƫƯdžDž Ǐƺ ȲǭNjɯNjDžǁƐ ƕǤþŧǁƐ ƱƐNjdžǄ **(1)**üNjǭɯǁƐ

ȲǭƟNjǁƐ	ƕǤŧþǁƐ	njþǤǀǁƐ ƕȲNjDžɯDžǁƐ	ƕǐȲþƻǁƐ ƕȲNjDžɯDžǁƐ	Ȳʅǉ!ƒ
M5	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	ŧƑþķƕdž!ƒ ȲƧķ!ƒ ŧǀƱǉdž! ƧĂƱķ!ƒ Ʊʅ Ăķdž!ƒ Ƨơƕ!ƒ Xerochrepts	Calcixerollic, vertic	NJ5ǅķƤdž
M6	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	ŧƑþķƕdž!ƒ ȲƧķ!ƒ ŧǀƱǉdž! ƧĂƱķ!ƒ Ʊʅ Ăķdž!ƒ Ƨơƕ!ƒ Xerochrepts	Calcixerollic, typic, vertic	ŧ5ǅķƤdž
M7	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	Xerochrepts	Calcixerollic, vertic	ŧ5ǅķƤdž
M8	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	Xerochrepts	Calcixerollic, vertic	ŧ5ǅķƤdž
M9	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	Xerochrepts	Calcixerollic, typic, vertic	ŧ5ǅķƤdž
M10	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	Xerochrepts	Calcixerollic, typic, vertic	ŧ5ǅķƤdž
M12	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	Xerochrepts	Calcixerollic, typic, vertic, lithic	ŧ5ǅķƤdž
M13	ȲƧķ!ƒ NJƑþķƕdž!ƒ ƧĂƱķ!ƒ Inceptisols	Xerochrepts	Calcixerollic, typic, vertic, lithic	ŧ5ǅķƤdž

M15	ƔƧƙ!ƒ ǋƑƥƙƅdž!ƒ ƧĂƱƙ!ƒ Inceptisols	Xerochrepts	Calcixerollic, typic, lithic	Ɨ5ǅƙPdž
M16	ƔƧƙ!ƒ ǋƑƥƙƅdž!ƒ ƧĂƱƙ!ƒ Inceptisols	Xerochrepts	Xerochreptic-calciorthids	Ɨ5ǅƙPdž
M17	ƔƧƙ!ƒ ǋƑƥƙƅdž!ƒ ƧĂƱƙ!ƒ Inceptisols	Xerochrepts	Calcixerollic, typic	Ɨ5ǅƙPdž
M20	ƔƧƙ!ƒ ǋƑƥƙƅdž!ƒ ƧĂƱƙ!ƒ Inceptisols	Xerochrepts	Calcixerollic, x	Ɨ5ǅƙPdž
M23	ƔƧƙ!ƒ ǋƑƥƙƅdž!ƒ ƧĂƱƙ!ƒ Inceptisols	Xerochrepts	Calcixerollic, typic, lithic	Ɨ5ǅƙPdž
M24	Entisols Ɨŏƙ5!ƒƗƅƧƙ!ƒ Ɨƛŏƥơ!ƒ	Xerorthents Ɨƛŏƥơ!ƒ ƗƅƧƙ!ƒ ƧǅơƄ!ƒ Ɨ|Ʊǉdž! ƱƪĂƙdž!ƒ	Calcixerollic Xerorthens, lithic	Ɨ5ǅƙPdž
M25	ƔƧƙ!ƒ ǋƑƥƙƅdž!ƒ ƧĂƱƙ!ƒ Inceptisols	Xerochrepts	Calciorthids, Camborthid ƗƅƧƙ!ƒĂ Ɨ5Ǵƞ!ƒ ƗŏƪǅǂƗ!ƒ Ɨ5Ǵƞ!ƒ ƗŏƅdžǴǂ!ƒ	Ɨ5ǅƙPdž
M27	ƔƧƙ!ƒ ǋƑƥƙƅdž!ƒ ƧĂƱƙ!ƒ Inceptisols	Xerochrepts	Xerochrepic calciorthid, cal, xerovhrepic, xerochrepic camborthid	Ɨ5ǅƙPdž
M28	ƔƧƙ!ƒ	Xerochrepts	Xerochrepic	Ɨ5ǅƙPdž

	ǸƑϸƙƅǳ!ſ ƧĂƠƙ!ſ Inceptisols		calciorthid,	
M30	ƔƧƙ!ſ ǸƑϸƙƅǳ!ſ ƧĂƠƙ!ſ Inceptisols	Xerochrepts	Xerochrepic calciorthid,	Ɨ5ǐƙƤǳ
M32	Entisols ƗǒƙƼ!ſƗƅƧƙ!ſ ƗǹǒϸơƗ!ſ	Xerorthents ƗǹǒϸơƗ!ſ ƗƅƧƙ!ſ ƧǐơƅƗ!ſ ƗǀƠǉǳ! ƠƪĂƙǳ!ſ	Xero calciorthid, torriorthent	Ɨ5ǐƙƤǳ
M34	ƔƧƙ!ſ ǸƑϸƙƅǳ!ſ ƧĂƠƙ!ſ Inceptisols	Xerochrepts	Xerochrepic calciorthid,	Ɨ5ǐƙƤǳ
M36	ƔƧƙ!ſ ǸƑϸƙƅǳ!ſ ƧĂƠƙ!ſ	Xerochrepts	Xerochrepic calciorthid,	Ɨ5ǐƙƤǳ

ƗǳƇǖǳ!ſ ǔǒǐơƙ ƇſƧŋǕ ArcView3.3 ǸǳƇǉƧƅ ǳϸƤƙƪſ ƘſƧǒƺƙǳ!Ɔƅ ƗƪƇƤ!ſ ƗǒƼƪĂ!ſ ƘƇǳĂǐžǳ!ſ ǔǳƇƗ ǔưĂ ϸžƅ ƟƧƠĂ ƗǒƅƠ!ſ ǈƇǸƇưǳ!ſ Ɣǒ!ƇƪǷ ǳſϸƤƙƪƇƅĂ .(9 ǔƗƬ!ſ) ǳƙ ǑƪƇƪƊ ǔƗƬ!Ƈƅ (Spatial Query) ƗǒǉƇƗǳ!ſ ƘǗƇƇƪƙ!ſ .(2 ǔĂϸŋ!ſ) ƗƪǒƑƧ ƘſϸơĂ ǔƼƪ Ǐ!ǫ ƘſϸơĂ!ſ ϸϸŽ ſ ǒǐƙ

ƅƇϸƗǐǈ ƫ ǝƑƬƇǐ ƅǳƄǖǳǐǈ ǕǐƗƟƗ (2) ǕǸǒǐǐǈ

ƔǐƟǸǒǐǈ	ϸǈǐƟǳǕǈ	ƄƑƱƷ ŋƱƨǐǈ	ƅƇϸƗǐǈ ƷǳƳ	ϸƑƱǳǓǈ ǕǐǔǳƄ	ƅƟƑƨǳǐǈ ²!ǀ	ƅǳƄǖǳǐǈ
Ǐ!ĂǕſ	ƧſϸơǉſǓ (A))ƷǒƤ	Ǐ!ǫ ƷǒƤ ƠƪĂƙǳ (L+M)	ǕƗǀǒǳƵ ſϸŋ ϸǒŋ (S1)	ǇǳǀƧǒƨƺ ƧƇƠǳƊ (1)ǳǐǐǳ ƧǹƗƇ5 300	72.1	ǇǳǀƗǒƵſƧƨ Ǐ!ĂǕſ ƗŋƧϸ!ſ
ƗǒǉƇĂ!ſ	ƷǒƤ ƧſϸơǉſĈ Ǐ!ǫ (A+B) ǔϸƙžǳ	Ǐ!ǫ ƷǒƤ ƠƪĂƙǳ (L+M)	ƗǀǒǳƵ (S1)	ǇǳǀƗƠƪĂƙǳ ƧƇƠǳƊ (2)ǳǐǐǳ 300-250	116	ƗŋƇơƅ ƗǒƵſƧƨ ǐƧ Ǐ!ǫ Ǒ5 ƗƪƇƤĂ ƗƵſƧƨ!ſ ƗǒǐǀơƗ!ſ

ƔǢƟǋǀƐ	þƐǢƟǆǗƐ	ƅƑƯƷ ƞƯƨǀƐ	ǆǦþŧǀƐ 5ǅƳ	þƑƯǅǕƐ ǖǢyǅ	ǆƟƑƨǅǀƐ ²!|	ǆǅǝǘǅǀƐ
ŧǍ!ǦǍ!ƒ	Ǉǅď Ƨƒþơǉƒ ĉ Ǐ!ǫ 2ǒ5Ƥ ǉþƬ ýþǩžď ƧƒþơǉǕƒ (A+B+C)	Ǐ!ǫ 2ǒ5Ƥ ƠǓǍǩď (L+M)	(S1)ŧ!ǒďƵ	Ǉǅď ŧǒ5Ƥ ƧǦƠǅǅ (3) ǅǅď 250-180	180	Ǐ ƣƒƧǅ ǗŧơǕ5 ŧƞǦơǆ ŧǒƵƒƧƨ ǏƧ Ǐ!ǫ Ǒ5 ŧǒǍƵƧǍ ƾƠǦǉď!ƒ Ǐ!ǫ ŧ!þǩžď!ƒ ƧƒþơǉǕƒ ǉþǒþƬ
ŧžǆƒƧ!ƒ	ƧƒþơǉǕƒ ŧ!þǩžď (B)	ƠǓǍǩď (M)	ŧƠǓǍǩď ƾďž!ƒ (S2)	Ǉǅď ŧƠǓǍǩď ƧǦƠǅǅ (2) ǅǅď 300-250	20	ǦǒƑƨƞ ŧǒƵƒƧƨ Ǐ!ǫ ŧ5ǦƣǕǦ ǑƵƧ!ƒ
ŧǓďǦƤ!ƒ	Ƨƒþơǉƒ ĉ (C))þǒþƬ	ƠǓǍǩď (M)	Ǘŧ!ǒďƵ (S1)	Ǉǅď ŧƠǓǍǩď ƧǦƠǅǅ (2)ǅǅď 300-250	12.9	Ǐ ƣƒƧǅ ŧǒƧƞƬ ŧǒƵƒƧƨ ŧǒǍƵƧǍ
ŧǓþǦǓ!ƒ	ýþǩžď Ƨƒþơǉƒ (C) þǒþƬ Ǐ!ǫ	ƠǓǍǩď (M)	ŧƠǓǍǩď ƾďž!ƒ (S2)	Ǉǅď ǉƧǒƨƺ ƧǦƠǅǅ ƧƛŧǦ5 ǅǅď 300 (1)	43	ŧǒǍƵƧ Ǐ ƣƒƧǅ
ŧžǆǦǓ!ƒ	ýþǩžď Ƨƒþơǉƒ ĉ (B)	ƠǓǍǩď (M)	ŧ!ǒďƵ (S1)	Ǉǅď ǉƧǒƨƺ ƧǦƠǅǅ ƧƛŧǦ5 ǅǅď 300 (1)ǅǅď	21.2	ŧǒǀơ ŧǒƵƒƧƨ ŧǒǍƵƧǍ

.1 ƨƐǢǆǉƖǅǅ ǉ ƐǕþ ƒ ǅƟƛŧǅƟƛ ŧƟŧǖǗ ƐǀǅǅǘǅǆǄ ǏƷ

:ǅƾǗƐǀǢþƐƨǆ

ŧǒ!Ǧơ!ƒ ƯƧǕƒ ƘǦďƒþƤǩǓƒ ǇǅǆƾƵƒǍǩ!ƒ 2ǒžǩ ǅǩǒ Ǒŧ! ŧ!ƠǉǅǑ5 ŧǆƧǩ!ƒ ǦǆƨǒďǩǩǑǩ!ƒ ŧďǇǖď!ƒ ýǒǀơǩ ǊƑǦǩǉ ýď ƾǍ5 ƯƧǕƒ ƘǦďƒþƤǩǓƒ ƘǦǀǆƠ ýƣǍ ǅǩ þǀ5 Ǘŧǉƒ Ƨþ!ƒ .(10 ý‡Ƭ!ƒ) ƯƧǕƒ ƘǦďƒþƤǩǓǕ ŧǆƧǩ!ƒ ŧďǇǖď ŧƠǒƧƤ ƘǦƵƒƧƨ ǍǅƧǦƞƬǅ Ǉǅď ǑƵƒƧƨ!ƒ ƨǒ‡Ƨǩ!ƒ ǅǇǅǆ ǇǅǆǩƵ þƤǍ ƺǀǆǩ Ǒǩ!ƒ Ǐ!ǍǕƒ ǉþơǍ!ƒ Ǒ5 ǇǦ‡ ŧǒ‡ǒǩǓǖǆ ƘǍǒǆǍ ŧǒǀơ ƠƠǓ ǦǦƠƺǍ Ǘ2ǒ5Ƥ Ƨƒþơǉǆ ƘƨǒďǩǗ²ǅ‡ (72.1) ǦǉǩơǦǓď þǒƞ ŧǆƧǩ ƾďƵǍ ǗƠǓǍǩď Ǐ!ǫ Ưƨ5Ƥǉď Ǉǅď ǉƧǦƞơ!ƒ Ǉǅď Ưžǆ Ǐ!ǫ ŧ5ǦƣǕǦǆ ǗǅǅǅǅǅǅǅƠ300 ǇǅƵ þǒƨǩ ŧǒ5Ǧ‡ ƧǦƠǅǅ ŧǒď‡Ǎ ǦǅǅƠ ǗƳƧƒƨď!ƒ ýƤƒþ ǉƧƛžǆď!ƒ Ǉ‡ǦǓď!ƒǍ ŧǒǉǦ‡Ǔ!ƒ ƘǦžďƞǩ!ƒ

ýƛď ǦǉǅǅƛǅǅƐ ŧƵƒƧƨǅǅ! ŧơ!ǦƮ ƯƒƧǅ ǑǇ5 ƷƒƧ5!ƒ ǑƣƒƧǕƒ .ǅǒƵƒƧƨ ǦǇ!ǖǩǓƒ ǅǩ ǑǩƒǑ ǑƣƒƧǕƒ

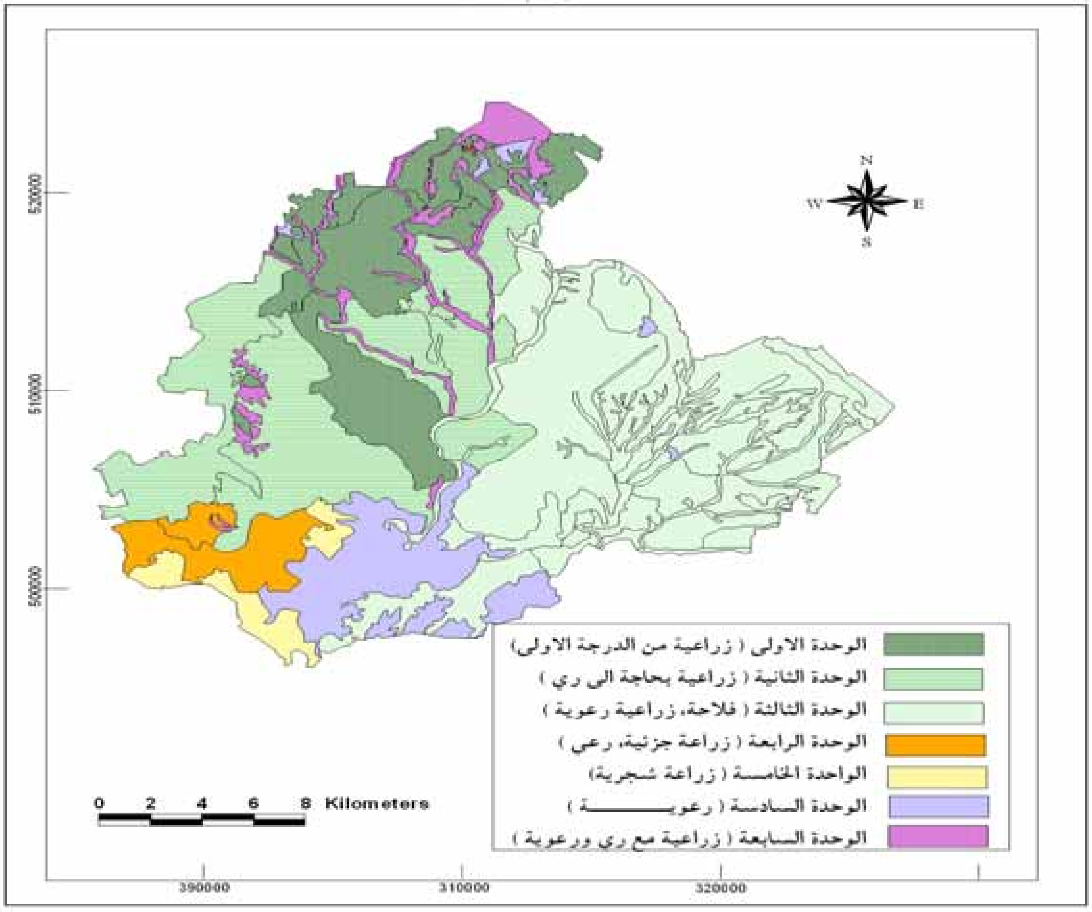
ŧ5ǦƛƇ ŧǒơ Ǉǅď ŧǒǉǦƛ!ƒ ŧǆƧď!ƒ Ǒ5 ŧǒǉǦƛ!ƒ ǉþơǍ!ƒ ǑǩǍǩǍ ƘǍǒǆǍ ŧǒǀơ ŧƵƒƧƨǍ ƧǦƞƬǅ Ǉǅď ƯƧǕƒ ƘǦďƒþƤǩǓƒ (116) ǦǉǩơǦǓď Ǘŧǒǉǆď ƾƠǦǉď Ǉǅď ǉƣǒǅǍ ŧǒ‡ǒǩǓǖǆ Ǐ!ǫ 2ǒ5Ƥ Ǉǅď ƠƠǓ ǦǦƠƺǍ Ǘ2ǒ5Ƥ Ƨƒþơǉǆ ƘƨǅďǩǗ²ǅ‡ (300-250) Ǉǆǆ ƟǍƒƧǩǩ ƧǦƠǅǅǍ ŧ!ǒďƵ ŧǆƧǩǍ ǗƠǓǍǩď ǏƧ Ǒ5 ǉþƵǦǓǅ! ǏƧ!ƒ ǀƧǆ ŧ!ƠǉǅƤ!ƒ ǉǅƝǅ Ǒ5 ƧƛŧǩǍ Ǘǅǅď ŧ!ƺǩǓď Ƨǒƺ ŧ!ƠǉǅƤ!ƒ ǉǅƝǅ Ǐ ƣƒƧǅ ǅƯžďǍ ǗƘǦƵǍƧƨď!ƒ .ŧƵƒƧƨǅ! ŧơ!ǦƮǍ

ýǦďƬ ǦǉǒƣƒƧǅ ǅƯžď ƴǀǩ Ǒǩ!ƒ ŧǍ!ǦǍ!ƒ ǉþơǍ!ƒ ǦďƠ (180) ǦǉǩơǦǓď ƺǀǆǩ5 Ǒ!Ǎþ!ƒ ƠǦǒǀƵ ŧ‡ǀď!ƒ ƧǦƠď ƔǍǀǉƞǍ

ƗŽƒƧƨ!ƒ ƗƮƓPĂ Ɠdž ǴŽĂǉ Ɨ5ŏƛǂ ƗŽƒƧƨ Ɠnjŏ5 þŋĂƙ5 Ü^{2}Ǆǂ
Ĭ!ǫ Ɨ5ƓưǗƓƕ ĭƧ!ƒ ĬǄŽ ƩŏƑƧ ýǂT!Ɠƕ þdžƙƶƙ Ŏƙ!ƒ ƗŏǄǀơ!ƒ
Ʊ ƶƕĂ ÜƧƓƱdž!ƒ ƔĂǉŋ ƗǀƱǉdž Ŏ5 ƗƮƓPĂ ÜƖƧdžƛdž!ƒ ƧƓŋTǕƒ
ƗƕƧƙ!ƒ ƫdžƶƕ ƗǀƱǉdž!ƒ ǉŘǋ ƨŏdžƙƙ .ƧƓƱdž!ƒ ƫŏƧƱ ƔƧƸ ƫƱƓǉdž!ƒ
þŏþT Ƨƒþơǉƒ Ĭ!ǫ ýþƙƶdž!ƒĂ ƻŏ5P!ƒ Ǉŏƕ ƟĂƒƧƙŏ ƠƱƪ ƧƒþơǉƓƕĂ
Ʊ5Pǉdž Ǉdž ƖƧƓŋơ!ƒ Ǉdž ƠƱƪ ƇƓƱƺƕĂ ÜƫƱƓǉdž!ƒ Ʊ ƶƕ Ŏ5
ƱƒƧǅ þŋĂƙ Ɠdžǂ .ǅǄdž (230) ƧƓƱdžǅ ýþƶdžƕĂ ƱƪĂƙdž Ĭ!ǫ
ƗǀƱǉdž!ƒ ǉŘǋ þƶƙ ÜƗǀƱǉdž!ƒ Ǉdž ƗpƧ5ƙdž ƇƒƨŋǅŎ5 ƗǄƺƙƪdž ƗŏŽƒƧƨ
.ƗŏĂƧdž!ƒ ƗŽƒƧƨ!ƒ Ĭ!ǫ Ɨ5ƓưǗƓƕ ƗŏĂŽƧ!ƒ ƫƱƓǉdž!ƒ Ǉdž

Ǉdž ƠƱƪ ƇƓƱƺƕĂ ÜýþƙƶdžƒƓNjƧƒþơǉƓƕ ƗƶƕƒƧ!ƒ ƖþơĂ!ƒ ƨƓƙdžƙ
Ɨŏdžǂ ýþƶdžĂ Üƫdžƶ!ƒ ƗƱƪĂƙdž Ŏnj5 ƗƕƧƙ!ƒ Ɠdžǅ ÜƱƪĂƙdž ƖƧƓŋơ!ƒ
Ü^{2}Ǆǂ (20) Ɠnjƙơ Ɠƪdž ƸǄƕƙ ÜǄǄdž (270) Ɠnjŏ5 ƗƱpƓƪ!ƒ ƧƓƱdžǕƒ
ƗǀƱǉdž Ǉdž ŎƕƧƺ!ƒ ŎƕĂǉŋ!ƒ Ƈƨŋ!ƒ Ŏ5 ƗǀƱǉdž!ƒ ǉŘǋ þŋĂƙ
ƧƓŋTǕƓƕ YĂƧƨdž Ɠnjƙơ Ɠƪdž Ǉdž (%30) Ŏ!ƒĂơ ÜƗƪƒƧþ!ƒ
.ǋƪ5ǉ ƘpĂ!Ɠƕ ƗŏŽƒƧƨĂ ƗŏĂŽƧ ƗǀƱǉdž!ƒ þƶƙ ƒŘ! ÜƖƧdžƛdž!ƒ

ĭƧPƮ ƇƓƱƸĂ ÜƗƕƧƙ!ƒ ƫdžƶƕ ƗƪdžƓP!ƒ ƖþơĂ!ƒ ƻ Ʈƙƙ
ÜǄǄdž (260) ƧƓƱdžǅ Ɨŏdžǂ ýþƶdžĂ ÜþŏþT ƧƒþơǉƓƕĂ ÜƱƪĂƙdž
ÜƖƧƛƶƕdž!ƒ ƘƓŽƒƧƨ!ƒ Ʊ ƶƕ Ɠnjƕ þŋĂƙ Ü^{2}Ǆǂ (12.9) Ɠnjƙơ Ɠƪdž
.ƗŏĂŽƧ ƗǀƱǉdž ƓnjǇǅ ĬǄŽ ƗǀƱǉdž!ƒ ǉŘǋ ƻǉƮƙ ƒŘ!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الوحدة الاولى (زراعية من الدرجة الاولى)
الوحدة الثانية (زراعية بحاجة الى ري)
الوحدة الثالثة (فلاحة، زراعية رعوية)
الوحدة الرابعة (زراعة جزئية، رعي)
الواحدة الخامسة (زراعة شجرية)
الوحدة السادسة (رعويـــــــــة)
الوحدة السابعة (زراعية مع ري ورعوية)

.(ƘƟƒƓǁƐ üǄƳ) . ƒ þǗƐ ƖƑǄƐƣǋƗƨǗ ƕƓþƗǁƐ ƕǄǄbúǄ ƕƱĭþǋ **(10)** üǀƪǁƐ ƨŢƙƙ Ü²Ďŧ (43) ĜnjƙơĜȤď ƺŀƙƙ5 ŧȤþĜȤ!f ŧǀƱǉď!f ĜďžĐ ÜƱȤĂƙď ýŧŢ!Ĝƕ ŀƧĜɳơ!f ĜnjơƱȤ ĂȤŧƙ ÜĜǋƧfþơǉf ŀþŢƕ Ƨŏƺ Ďǉď (345) ĜǋƧĜƱďĐ ýþžď LJf Ǖǫ ÜŧƕƧƙ!f ǂĜơƲƕ ƨĜƙďƙ ĜnjǉĐ ĬǉƵ ŧǀƱǉď!f ǉǋǋ ƨǉŢƙ ǁ!Ʀ! ÜǮƧþĜǉ Ǖǫ ǃŏƵfƧƨ ŧǁƺƙȤď .ŎǉĜŧȤ ýďɳƙ ŧǀƱǉď LJĂŧƙ LJĜƕ ƠǁŢƙĂ ÜŧŏĂƵƧ

Ĉƨɳ!f Ŏ5 ýǀƙ5 ŀƧŏƤŪfĂ ŧžƕĜȤ!f ŧǀƱǉď!Ĝƕ ȿǁžƙŏ Ĝďŏ5 Ü²Ďŧ (21.6) ĜnjƙơĜȤď ƺŀƙƙ ÜŧȤfƧþ!f ŧǀƱǉď LJďƙ Ŏ!ĜďŢ!f ĭƧƤŢ ĈĜƱƺĂ ÜýþƙȤď!f ĜǋƧfþơǉfĂ ĜnjƙƕƧƙ ȿďžƕ ƨŢƙƙ ŧǀƱǉď!f ǉǋǋ ƨǉŢƙ fǁ! Üǉďď (350) ƧĜƱďĐ ýþžďĂ ÜƱȤĂƙď Ď! Ŏƙ!f ƘĜơĜȤď!f ŧŏƕ ĜďžĐ .ŧŏĂƵƧĂ ŧŏƵfƧƨ ŧǀƱǉď ĜnjǉĐ ĬǉƵ Ĝnjŏ5 Ĝďƕ ŧŏǉƕď!f ȿƱĜǉď!f LJďƲ ƗžþfĂ Ŏnj5 ĜǋƧŧǁ þƧŏ .Ʒfƨƨ!f ƲƧŪf

.13 ǁƨǋǁǁ ǀǁþƟŷǁǁ ǋþŧȿƊǁǁ ǋƨŧǃǋǁ ƖǁƐǑ ǀ þŬǁ : f

Ŏ5 ĜnjǉƵ LJǁƵĐ Ŏƙ!f ăƧƕŧ!f ŧǉþďƙ!f Ăďǉ :LJĜďƵ ŧƱƤ Ƙƨǫ ƘǁďŢ ăƧƕŧ!f LJĜďƵ ŧǉĜďĐ Ĭ!ǫ ŀþŏþɳ ȿƱĜǉď ĎƲƕ 2008 ƧĜƕĐ ýď ŧŢĜƤ ŧŏ5fƧƺĂďŏþ!f ƘĜŏþơƙ!f ǋɳfĂď! ǁ!ƦĂ ŧȤfƧþ!f ŧǀƱǉď ŧȤŏƒƨ!f Ăďǉ!f ƨŧfƧď Ŏ5 LJĂŧƙ LJĐ ĬǉƵ Üþŏfƨƙď!f ŎǉĜŧȤ!f Ăďǉ!f (700000) ƔƧĜǉŏ Ĝď ƔĜžŏƙȤŬ ŀƨŏɳ!f ŀþƕ ýĂơ ŀþþơď!f ĜnjďŏþƧƙ Ďƙ þþĂ ÜŀþþơďĂ ŧ5ĂƧƨď ýȤĂƙ!f ȿƱĜǉď LJĐ ĜďƕĂ .ŧďȤǉ LJĜďƵ ŧǉĜďĐ ĜnjƙƧþŢĐ Ŏƙ!f ƧfƧǀƙȤŬf ȿƱĜǉď ŧƱŏƧƤ LJďƙ ŀƨŏɳ!f ŧǀƱǉď Ŏ5 ŧŏ!Ĝơ!f ŧŏǉƕď!f ȿƱĜǉď!f ƘǉďƲƙ ŧŏơ ăƧƕŧ!f ŧǀƕƱ!f ýƲĂ Ďƙ þǀ5 ÜŧƱƤ!f Ƙƨp Ĝďŧ ýȤĂƙ!f ȿƱĜǉďĂ ƲƧŪf ƘĜďfþƤƙȤf ƘĜǀƕƱ ȿĂ5 ýȤĂƙ!f ȿƱĜǉďƕ ŧŢĜƤ!f ŧǀƱǉď Ŏ5 ŎǁƕƙȤď!f ŎǉĜŧȤ!f ýȤĂƙ!f ŧơĜȤď ƔĜȤơ! ŧŏ!Ĝơ!f Ŏ5 ƨŧƧƙƙ ƨĂȤ Ŏƙ!fĂ Ü²Ďŧ (89.4) Ƙƺǁƕ Ŏƙ!f ŧȤfƧþ!f ăƧp Ŏ5 ŧȤfƧþ!f ŧǀƱǉď LJďƙ ŧƕƧƺ!f ŧǀƱǉď!fĂ ŀƨŏɳ!f ŧǀƱǉď ŧɳŏƙǉ ĜǋƧĂþƕ ýȤĂƙƙ ƨĂȤ Ŏƙ!fĂ ÜýƙǉĂ ŀƧĜǉď!fĂ ŀƧfĂơ ýĂǁɳ ²Ďŧ (15) ŎǉƕƙȤď!f ýȤĂƙ!f ŧơĜȤď LJďƙ ÜŧžŏǉƱ!f ŀþĜƨ!f .ŧǉǁơ!f ŧƵfƧƨ!fĂ ƧĜɳŢĜƕ ýƺƙȤď

ȿƱĜǉď!f Ŏ5 ƧĜďƵŬĜƕ ÜŧƱƤ!f ƔɳĂďƕ ƠďȤŏȤ Ĝďŧ ƧĜďƵŬf LJĜŧ fǫǫ (ýȤĂǁ! ŀþþơď!f ȿƱĜǉď!f ǀƧĜƤ) ŧǀƕĜȤ!f ĎƲp ŎǉžŏŊǋĂ ÜŧƵfƧƨ!Ĝƕ ŏƱƕƧďĂ ŧ5ĜŧŊ ýŏǉp ŏŏǉŧȤ ƘĜƕǉȤ LJďƙ ŎǋĂ ÜŧƵfƧƨ!Ĝƕ ŎƲfƧŪf LJďƙ ŧŏ5ĜƲǫ ƘĜơĜȤď ŏƲŏĐ ŎǉĜŧȤ ƔƦɳ ȿƱĜǉď ƠƕŢƙȤ ȿƱĜǉď!f ǉǋǋ LJŬ ŧƱƤ!f ŧǀƱǉď!f ĬǉĐ Ĝďŧ .ŧŏǉŧȤ!f ƘĜžďɳƙ!f ŧơĜȤď LJďƙ þŏƨŏȤ Ĝďďƙ

²Ďŧ (24.8)ĜnjƙơĜȤď ƺŀƙƙ Ŏƙ!f ŧȤfƧþ!f ŧǀƱǉď LJďƙ ŧŏ!ĜďŢ!f LJďƲ ŧžpfĂ!f ŎƲfƧŪf ýŏďɳ) ĭƧƲơ!f ƨǉƺď!f LJďƲ ýǀƙ (ĭĂďǉƙ!f LJĜďƵ Ƨďď! ƟƧƙǀď!f ƧĜȤď!Ĝƕ þþơď!f ƧĜďƵŬf þĂþơ .ŧŏǉĜƙ!f ŧǀƧďƵ!Ĝƕ ŧ!ĂďŢď ŎǋĂ LJĜďƵ ŧǉŏþď!

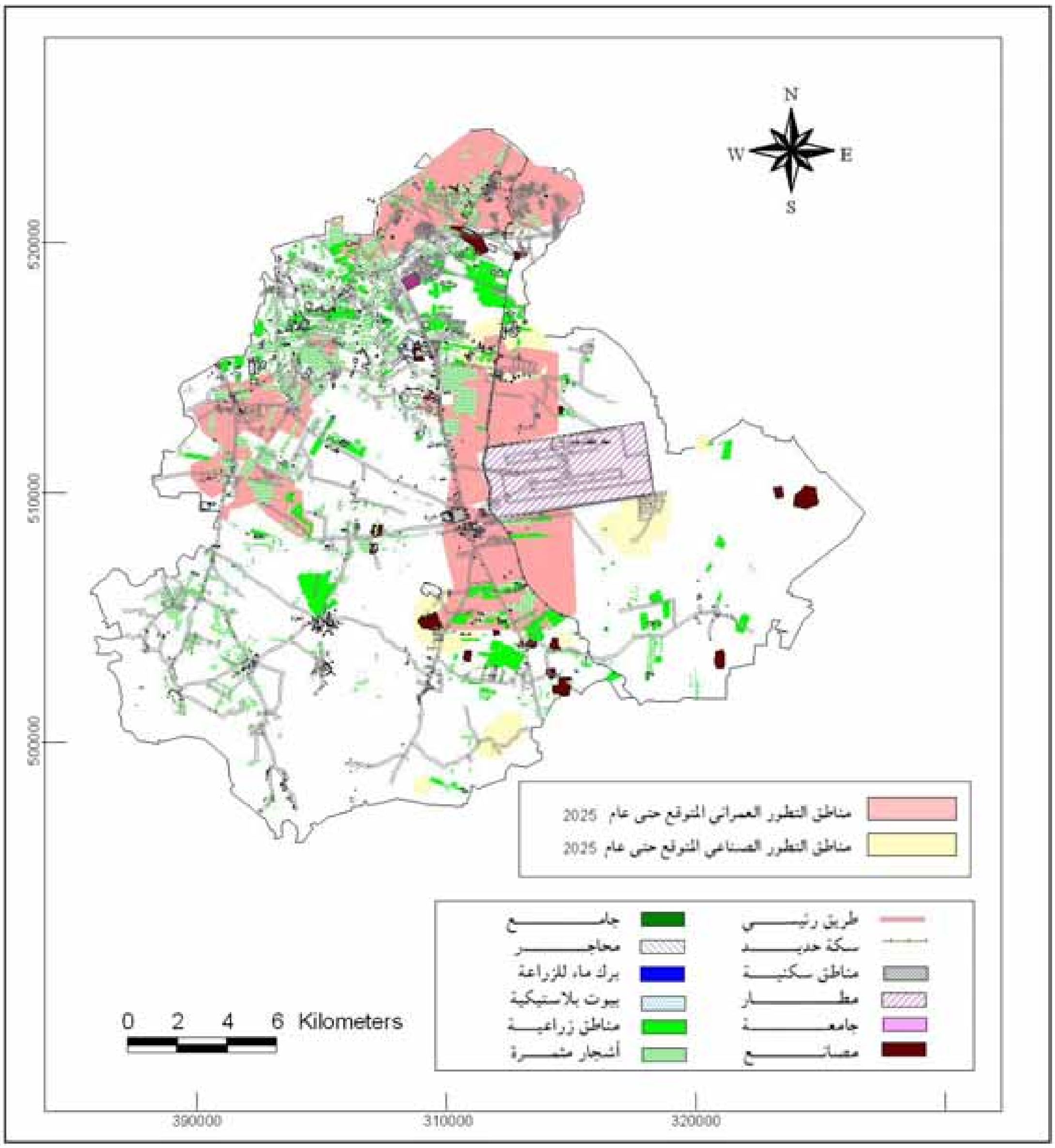
.14 ǀƨǋŧǁǁ ƖƳƒŢǁǁ ǀƨǋǉƔǁŧƨǋǉ ŀƑďǁþ ǀþŬǁ : f

ŎƲfƧŪf ŧȤĜŏȤ Ŏ5 ƧǀǉƠ!f ƺƲŏĐ ýȤĂƙ!f ŧƱƤ ƘƲp ÜŀƧĜƙƤď ýþfĂď Ŏ5 ŧŏƵĜǉŢ!f ȿƱĜǉď!f þŏþơƙ ŧŏƵĜǉŢ!f LJďďŏ ýŧŢ!Ĝƕ ŧpƧ5ƙď!f ŧŏƵĜǉŢ!f ýŏƧĜŢď!f ǋďþ ĬǉƵ ýďž!fĂ ȿƱĜǉď!f Ĭ!ǫ ƧǀǉƠ!ĜƕĂ .ŧǉŧȤ!f ȿƱĜǉď!f Ĭ!ǫ ýĂŢĂ!f Industry area ŧŏƵĜǉŢ!f ȿƱĜǉď!f ýþfĂď! ŧŢŢƤď!f Ŏ5 Ƙƨŧƨƙ ĜnjǉƵ5 Ü²Ďŧ (20) ĜnjƙơĜȤď Ƙƺǁƕ Ŏƙ!f location ĜnjǉƵď ýƺƙȤŏ ŧŏơ ÜǋƕĂǉɳĂ Ŏ!Ăþ!f ĈĜŏǁƵ ŧŧǁď!f ƧĜƱď ýĜďŢ ȿƱĜǉď ĜďĐ Ü²Ďŧ (3.2) ŧŏƵfƧƨ!f ƲfƧƺŬf Ŏ5 ƗŏĜơ Ƙƺǁƕ5 Industrial applications ŧŏƵĜǉŢ!f ƘĜǁŏƕƱƙ!f ƔĂǉɳ ŧǀƱǉď Ŏ5 Ƙƨŧƨƙ Ü²Ďŧ (6) Ĝnj! ŧŢŢƤď!f ŧơĜȤď!f ĜnjǉƵď ýƺƙȤŏ ÜŧȤfƧþ!f ŧǀƱǉď LJďƙ ŧƕĂǉɳ!f ŧǀƱǉď!fĂ ƧĜƱď!f ƘĜƵĜǉŢ!f ĜďĐ.ŧŏƵfƧƨ!f ƲfƧƺŬf Ŏ5 ²Ďŧ (2.6) ĜŏĜơ ĜnjƙơĜȤď Ƙƺǁƕ þǀ5 Zoned industrial area ŀþþơď!f Current ŧŏ!Ĝơ!f ƘĜƵĜǉŢ!Ĝƕ ȿǁžƙŏ Ĝďŏ5Ă Ü²Ďŧ (5.6) ŎǋĂ ²Ďŧ (6.5) ĜnjǁƺŢƙ Ŏƙ!f ŧơĜȤď!f Ƙƺǁƕ þǀ5 industry ŎǋĂ ĜďŧĂ ÜŧȤfƧþ!f ŧǀƱǉď LJďƙ ŧpƧ5ƙď ȿƱĜǉď Ŏ5 ŀþĂɳĂď .(11)ýŧŢ!f Ŏ5 ŧơƲĂď

.15 ƛəǁŧǁǁ üǁŧƟŧ:

:ŧŏƙŬf ǋƑĜƙǉ!f Ĭ!ǫ ŧȤfƧþ!f ƘǁŢĂƙ þ!

ăĂƙȤď ĬǁƵ ĭþĜŢƙpŬf Ăďǉ!f ƱĜďǉĐ Ŏ5 LJŏĜƕƙ!f ăþĐ ŧŏƧƲơ!f ȿƱĜǉď!f Ĭ!ǫ ŧŏƨŏƧ!f ŀƧɳnj!f LJďƙ þŏƨď Ĭ!ǫ ĎŏĜpŪf ĭƧƲơ!f Ăďǉ!f ƘŬþžď Ŏ5 LJŏĜƕƙ Ĭ!ǫ ĎĂ LJďĂ Üýďž!f ƔǁƱ! ƲĜƤǉfĂ ÜŧĂŢƤ!f ƘŬþžď ƳĜ5ƙƧf LJĜŧĂ .ƘĜ5ƛĜƕƱ!f Ŏ5 .ǁ!Ʀ ƳĜ5ƙƧf LJƵ LJŏ!Ăď ŧƧȤ!!f ŀƧɳnj!fĂ ƘĜ5ŏĂ!f ƘŬþžď Ĝnjŏ5 ýďɳƙƙ Ŏƙ!f (LJĜďƵ) ăƧƕŧ!f ŧƧƲơ!f ƘĜžďɳƙ!Ĝ5 ŧŏƵĜďƙɳŬf ƘĜďþƤ!fĂ ŧŏƵĜǉŢ!fĂ ŧþĜŢƙpŬf ŧƱŢǉŬf ĎǁžƙŏƘ ȤŏƒƧ ƔƦɳ ýďfĂƵ ĜǋƧĜƕžƵĜƕ Üŧ!Ăþ! ŧơŢ!fĂ ŧďŏǁžƙ!fĂ ĬǁƕƙȤ ÜǁǁƧĜƤ!f LJďĂ ƧƲơ!f Ĭ!ǫ ƨŏƧ!f LJďƙ LJŏƧɳĜnjďǁ! .ýȤĂƙ!f LJďƙ fþŏƨďĂ LJŧȤ!f LJďƙ fþŏƨď ƔǁƱƙƙ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مناطق التطور العمراني المتوقع حتى عام 2025
مناطق التطور الصناعي المتوقع حتى عام 2025
طريق رئيسي
سكة حديد
مناطق سكنية
مطار
جامعة
مصانع
جامع
محاجر
برك ماء للزراعة
بيوت بلاستيكية
مناطق زراعية
أشجار مثمرة

. ƒ þÜɛ lƒDžɛqƠƗƨɛ hƱǐþƠ ĂƗY hYNjȚNjDž ĬYƒdžTǁɛ ÜƨNjƗǁɛNj ĬdžɛþDžyǁɛ ÜƨNjƗǁɛ hƱǐþƠ **(11)** ülǖǁɛ

ĠnjköǐǰhD Ƙdžnjƙ!ƒ þ15 ÜlƧưP!ƒ Ɨǐöǐþ Ɨǰöþdž LJĠdžƵ Ɨǰöþdž þzƙ Džưö ǐŖ!ƒ ĠnjƱöơdž ÿǖĂƙ!ƒ ƒŖNj ƟĠƙŋƒĂ ÜƗöƵƒƧƨ!ƒ Ġnjöưƒ ƧD Ŏ5 LJƗƙ Dž! lþöþŋ ƨƱĠǐdž Ĭ!9 ljƒþzƙ ýƕ ƗöƵƒƧƨ Ĭưƒ ƧD .ÞNŋƙƙ LJöD Ĭ!ƒĂ LJĠdžƵ ýȚƙǖ LJöD Ĭ!35 ÜLJĠƕǖơ!ƒ

LJĠdžƵ ƗǰĠdžD þĂþơ ƗzǖĂƕ 2007 DžĠƵ LJĠdžƵ ƗƱP Ƙưþ ĬǐƵ Ŗ5ljƙ ^{2}Dž‡ (705) ƘljĠ‡ LJD þzƕ Ü^{2}Dž‡ (957) ăƧƕ‡!ƒ LJdž ƗǐơƧdž ý‡ lþdž Ü2025-2008 DžĠƵ LJdž ýơƒƧdž ƗŇǚ .ƘƒĂǰǖ Ƙǖ ýơƒƧdž!ƒ

ƗöǰĠƛ!ƒ ƗǐơƧdž!ƒ Ŏ5 ƗƱP!ƒ ljŖnjƕ ƧƛdƘ!Ġƕ lƨöŋ!ƒ ƗǐƱǰdž Dþƕƙ LJdž Ŏ!ĠdžT!ƒ Ƈƨŋ!ƒ Ƨƛdƙö Ɨöơ Ü2019-2014 LJdž lƧƙ5!ƒ Ŏ5 LJdžư ylöĂ ^{2}Dž‡ (28.9) NƙơĠǖdž Ƹǐƕö ǐŖ!ƒ ƗǖƒƧþ!ƒ ƗǐƱǰdž ýdžĠ‡ Ŏljƒ Ƨdžz!ƒ yǖĂƙ!ƒ DžnjƙǐöǖƗöơ ÜǐƧươ!ƒ ƸǐƺdƷ!ƒ

ƗǆƇǖǆ!ƒ ƗƖƱǉǆ ǈǆ ƲƒƧƊ ǅŋǒƼ ƴǇǨ ƗƖƱǉǆ!ƒ ǉǇǋǍ ǕƗƖƱǉǆ!ƒ ǕƗǒǍƺƧǍ ƗǒƺƒƧƨ ǅǌǉǅǊ ƗƼǉƬǆ!ƒǍ ^{2}ǅǂ (7.9) ƗƺǊǅ˥!ƒ Ʋƺǌ Ǒ5 ǄǒƺƒƧƨǍ ǄǍƵƧ ƗƼǉƬǆ!ƒǍ ^{2}ǅǂ (1.6) Ɨ˥ƥǅ˥!ƒǍ ǈǆ ǄǒƺƒƧƨ ƗƼǉƬǆ Ǒǌ5 ^{2}ǅǂ (19.4) Ǐ!ǍǕƒ ǅǄǅ ǕƴƥƒǍǆ!ƒ .Ǐ!ǍǕƒ ƗƞƧƥ!ƒ

Ǒƣǉǩ5 2025-2020 ǈǆ ƥǨǆǨ˥ Ǒǩ!ƒ ƗǇ!ǅǇ!ƒ ƗǁơƧǆ!ƒ ǅǅǅ (%85) ǏƧƣơ!ƒ ƻǁƺǆ!ƒ ƴƤƒƥ ƴ˥ǍǨ!ƒ ƴǅǆǂǅ ƗƱƤ!ƒ ƨǂƒƧǆ ƧǒǍƱǨǍ ƗǉǒƥǆǊƒ ǎǍǨ˥ǆ ǏǁƵ ǍǆǉǊƒ ƨǂƒƧǆ ƧǒǍƱǨǍ ǅƣǨǍ) ǏƧƣơ!ƒ ƻǁƺǆ!ƒ ǁƧǅƤ (%15) ƴ˥ǍǨ!ƒ ƫƱǅǉǆ ƥǍƥơ ǁƧǅƤ ƥǨǆǨ Ǒǩ!ƒ ƗǆǍƥƤǆ!ƒ ǉƧǍƱǆ!ƒ Ƨǒƺ ǑƣƒƧǕƒ ƨǂƧǆ ǑǋǍ Ǖ(ƧƒƧǉǨ˥Ǖƒ ƫƱǅǉǆ ǈǆƣ ǈǂ!Ǎ ƗǒǉǊǆ!ƒ ƗƖƱǉǆ!ƒ ƫƱǅǉǆǍ Ǖ(ǉƨǒƞ!ƒ) ǎƧǊǂ!ƒ ƗǉǒƥǆǊƒ ǎǍǨ˥ǆ ǏǁƵ ǍǆǉǊƒ ǏǁƵ ƱǒƱƤǨ!ƒ ƗƖƱǉǆ ǈǆƣ ƗƺƥƒǍ!ƒ ƫƱǅǉǆƒ!ƒ) ƧƒƧǉǨ˥Ǖƒ ƗǆƥƤǨ˥ǆ!ƒ ǑƣƒƧǕƒ) ƴǆƺ!ƒ ƫƱǅǉǆǍ ƴǍǁƞ (ƗǉǒƥǆǊƒ ǎǍǨ˥ǆ (ƗǒƺǅǉƬ!ƒ ǅǅƺǅƱǉ!ƒ ǈǆƣ ǅǅǆƥƤ!ƒǍ ƴƑǅƣǊ!ƒ ǁǅǨǉǕ ƧǅǆƵǕƒ ǅǉǁƺƬǒ˥ Ǒǩ!ƒ ƗơǅǆǊƒ ƸǁǊǨ˥Ǎ ƴƱ˥!ƒǍ ǉƨǒƞ!ƒ .^{2}ǅǂ (60.4)

ǑǋǍ (1,2,3) ƗǆǅǖǆǊƒ ǅƥơǍ ǈǆƣ ƫƱǅǉǆǊƒ ǉǇǋǍ ƴǉǩ Ʋƺǌ Ǒ5 ƗǁơƣǊƒǍ ƗǉǒǆƺǊƒ ƗǒǁǂǊƒ Ʊ˥ǍǆǆǊƒ ƧơǊƒ ƗǊƧǨ ǅǅƣǊǊƒ ǅǨơǒ ǅǆǆ ǕƗƺƒƧƨǁ Ɨơ!ǅƬ ƫƱǅǉǆ ǑǋǍ ǅǌǅƒƨƞǅ ƥǅǆǍƞǨ!ƒ ǅǅǉǍǨǅ ǕǈǑǆǁơƧǆ!ƒ ǅǁǂ Ǒ5 ^{2}ǅǂ (89.3) ǏǁƺǉǉǍ ǆǍǆǉǊ ǆǆǉǉǉ ǑǨ!ƒ ƗǊƱǉǆ!ƒ Ǒ5 ǅǑ!ǅơ ǉƥƞƒǍǨǆ!ƒ ƗǒǉǅǂǨ!ƒ .ǅǑƺǒǊƱ

Ǒ5 Ǐƥƥǩ˥ Ǒǩ!ƒ ǑƣƒƧǕƒ ǉƧǅƞǩ ƱƬǉǨ ǈǆ ƴƥǍǨǒ ƥƒƧǩ˥ǍǨǅ ǈǆ ƗǒǊƧƺ!ƒ ƗǁƱǉǆ!ƒ Ǒ5 ǑǉǅǂǨ ƨǂƧǨ Ǐ!ǆ ƗǅǉǉǉǉǊ!ƒ ƧǅǒǨƤƒ ǅǨ Ǒ!ƥƥ!ƒ ǅǅǁǅƺ ƗǂǆǆǊ!ƒ ƧǅƱǆ ǈǅǊ ǅǆǆƺ ǕƧǅƱǆǉ!ƒ ǈǕƒ ǍǉǅǍ ǕƗǒǉǂ˥!ƒ ǅǅƞǉƥǨ!ƒ ǈƺ ǅƥǒƺǊ ǈǍǂǒ Ǒǂ! ǉƞƥǍǆ .ƗǒǉǂƤ˥!ƒ ǅǅƞǉƥǨ!ƒ ǈǆ ƳƧǉ!ǅǊ ǈǍǂǒ! ƥǍƺǒ

ƣƧǕƒ ƗǁǅƤǆ ǈǅǊ ƣƧǕƒ ǅǕƥǅǆƺǨ˥ƒ ƗǒǒƧƤ ǅơƣǍƒǅ ǅǉǉǆ Ǖ^{2}ǅǂ (89.3) Ǒǋǉ Ɨ˥ƒƧƞ!ƒ ƗƖƱǉǆ Ǒ5 ǅǑ!ǅơ Ɨǉƺǩ˥ǆ!ƒ ǉǉơǅ˥ǆ ǅǆ ƗǒǉǉơǊ ǅǅƺƒƧƨ!ƒ ƴƺƬǨǍ ǕǉƧƞƬǆ ^{2}ǅǂ (36) ƣƧǕƒ ǅǅǆƒƥƤǨ˥ƒ ƒƥƺ ǅǆ ƗǒǉǉơǊ ǅǅƺƒƧƨ ^{2}ǅǂ (21) ƴ˥ǍǨ!ƒ ƫƱǅǉǆ Ǒ5 ^{2}ǅǂ (15) ǅǑ!ǅơ ƴƺǨ˥ǒ ǈǍǒơ Ǒ5 ǕǁƧƤǕƒ .ƧǅƞƬǕƒ ƗƒƧƨǍ ǕƗǒǉǉơ!ƒ ƗƺƒƧƨǊ! ƗơƧǨǅǆ!ƒ ƴƥƒǆ! ^{2}ǅǂ (20) ƒ ǒƬƤǨ ǅǨ ƥǉ5 ǑƺǅǉƬ!ƒ ƴ˥ǍǨ!ƒ ǅǅǅ

Ǎ ǕƗǒƺǅǉƬ!ƒ ǅǅǁǒǉƱǉǊ! ^{2}ǅǂ (6)Ǎ ƗǒƺǅǉƬ!ƒ ƫƱǅǉǆǊ!ƒ ǅǅƺǅǉƬ!ƒ ƴƺƬǨǍ ǕǉƥƥơǆǊ ƗǒƺǅǉƬ ƫƱǅǉǆǊ! ^{2}ǅǂ(5.6) ƫƱǅǉǆǊ!ƒ ǉǉƺƬǨ˥ ǅǆ ǄǍǆƞǆ ǑǊƬǒ ǁ!ǅǊǍ ^{Ǖ2}ǅǂ (6.5) Ɨǒ!ǅơ!ƒ Ɨ˥ƱǉǆǊ!ƒ ǉǇǋǉ Ǒ5 ƴƺǨ˥ǒ ^{Ǖ} ^{2}ǅǂ (38) ƗƺǅǉƬǊ! ƗƬƬƤǆ!ƒ ƻǅƣǒ .ƗǒƺƒƧƨ!ƒ ƣƒƧƺǕƒ Ǒ5 ^{2}ǅǂ (5.8) ǉǨơǅ˥ǆ ǅǆ ǅǑ!ǅơ Ɨƺ˥Ǎǩ! ƗƞǒǨǉ ƗǒƺƒƧƨ ƣƒƧƊ ǈǆ ǉƥǉ5 ǅǨǒ˥ ǅǆ ǁ!ǁ Ǐ!ǅ ƗǒǊǂ!ƒ ƗơǅǆǊ!ƒ ƴǅ˥ơǊǍ .ǍƧƤǕƒ ƫƧƱ!ƒǍ ƧǅƱǆǊ!ƒ ƫǒƧƱ (120.9) ǅƺǊǊ ƥǉ5 ƟǒǨǉǆ!ƒ ǑƺǅǉƬ!ƒǍ ǑǉƒƧǆǊ!ƒ ƴ˥ǍǨǊ! .ǉƥǒƞ!ƒ ƫƧƱ!ƒ ƠǨ5Ǎ ƫƧƱ!ƒ Ɨƺ˥ǍǨ ƒƥƺ ǅǆ ^{2}ǅǂ (6.5) ǈǅǆƺ ǈǅǂ˥ ǅǊǊǒ ǈǅ ǅƧǊǂ!ƒ ǈǅǆƺ ƗǉǅǆǅǄ ǅƺƤǍǨ ǈǍǉǉǆ 1.3 ƴǉƱǨǒ ǅǆǅǆ Ǖ2025 ǅǅƺ ƴǍǉơ Ǒ5 Ɨǆ˥ǉ ǈǍǉǉǆ (%15)Ǎ ǏƧƣơ!ƒ ƻǁƺǆ!ƒ ƴƤƒƥ (%85) ǅǉǉǆǕƗǒǉǂ˥ ǉƥơǍ ǈǅ5 ƴǉƱ!ǅǊǍ .Ɨǒǉǂ˥ ǉƥơǍ (195000) ƴƥǅǒ ǅǆ ǏƊ ǉƞƧǅƤ ǅƒƥơǍ!ƒǍ ƗǒǉǅǂǊ!ƒ ǅǅƺƤǍǨ ƴǅ˥ơǊǍ ǕǉǉǊ ƺ!ǅǊǆ ǅǒƤƧ!ƒ ƒǇǉ ǏǁƺƒƥǅǆƺƒƧ 2024 ǅǅƺǍ 2014 ǅǅƺ! ƗǆƨǓ!ƒ Ɨǒǉǂ˥!ƒ ǍǆǉǊƒ ǅǕƥǅƺǆ ǅƒƥƤǨ˥ǅǊ 2004 Ǎ 1992 ǏƥƒƥƺǨ ǅǅǉǅǊǊ ǉƧ˥Ǖƒ ǅǉơ Ʊ˥ǍǨǆǍ ǈǅǂ˥!ƒ ǅǅƺƤǍǨ Ɨ!ƥǅƺǆǍ ǑǉǅǂǊ!ƒ ǈǅǆƺ Ǒ5 2014 ǅǅƺ! ǈǅǂ˥!ƒ ǅǅƺƤǍǨ ǈǅ5 ǕƧ˥Ǖƒ ƥƥƺǍ Ɨǒǉǂ˥!ƒ ǅƒƥơǍ!ƒ ƥƥƺǍ Ɨǆ˥ǉ ǈǍǉǉǆ (2.748) ǈǍǂǒ˥ .ǉƧ˥Ǖƒ ǅǉơ ǏǁƵ ǅǉǉǁǍ Ɨǒǉǂ˥ ǉƥơǍ (198000) ƗǆƨǓ!ƒ ǕƗǆ˥ǉ ǈǍǉǉǆ (4.6) ǍǇǉ5 2024ǅǅƺ! ƴƥǍǨǆ!ƒ ǈǅǂ˥!ƒ ƥƥƺ ǅǅǅ ǕƗǒǉǂ˥ ǉƥơǍ (332000) ƗǊǍǉƱǆ!ƒ Ɨǒǉǂ˥!ƒ ǅƒƥơǍ!ƒ ƥƥƺǍ :Ɨǒ!ǅǩ!ƒ ǅǕƥǅƺǆ!ƒ ǅƒƥƤǨǅǊ ǅǉǊǅ˥ơ ǅǨǍ

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ǈǅǂ˥!ƒ ƥƥƺ ǅ˥ǉǍ5 ǉƧ˥Ǖƒ ǅǉơ Ʊ˥ǍǨǆ!ƒ ƗǉǊǉǅǊ ǅǅǅ ǅǉǉǆǍ ǕƧ˥Ǖƒ ƥƥƺ ǏǁƵ ƴƬơǉ5 Ʊ˥ǍǨǆ!ƒ ǏǁƵ ƴƥǍǨǆ!ƒ .Ɨǒǉǂ˥!ƒ ǅƒƥơǍ!ƒ ƥƥƺ ǏǁƵ ƴƬơǉ

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Using Remote Sensing and GIS Techniques for Studying The Amman Plan up to 2025: A Case Study of Aljiza Area South of Amman

Naief Mahmoud Alrousan *

ABSTRACT

The main purpose of this research is to illustrate the effect of including the Aljiza area (471km^2) as an agricultural land to the Amman plan of Greater Amman Municipality in 2007. Amman expanded on the surrounding agricultural area, not merely because of urbanization, population growth and migration, but also because of the declining urban density and because it is the dominant city. To show the effect of this expansion, remote sensing and GIS techniques have been used for the suggested Amman expansion to produce land use map and soil map and to perform suitability analysis of the characteristics of the soil of the area for urban growth. Land use analysis showed that 89 km^2 is actually used in the area, around 47 km^2 of which are planted with trees and vegetables. The Amman Plan was divided into three main stages. The expansion will start during the second stage (2014-2019), which will affect the northern part (28.9km^2) of the area which is classified as agricultural land and is located inside the urban range bordered from the south by Amman Development Corridor. The third stage (2019-1025) will include expansion of built up area (60.4km^2) outside the urban range in Aljiza and in Jalul in the western part of the area and those are classified as agricultural lands. The total of 38km^2 are designed for industrial use, part of which is used for agricultural purposes nowadays. The study recommended preventing any activity over agricultural land and distributing investments to other regions, preventing any economic activity over agricultural land and making expansion towards less arable lands in the east.

Keywords: Urban Envelope, Amman Development Corridor, Greater Amman Municipality.

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