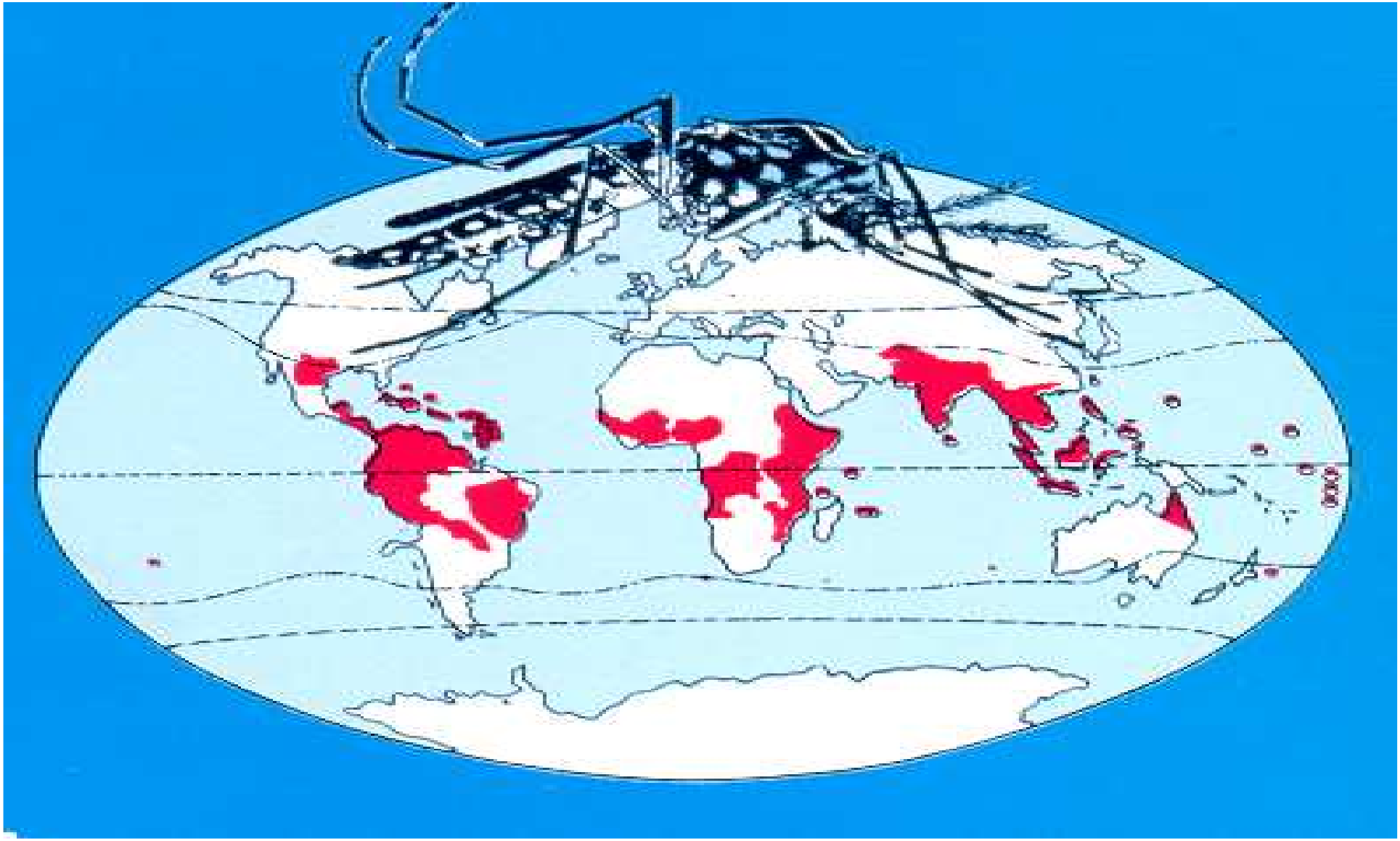
FIRST INTERNATIONAL SYMPOSIUM ON HEALTH GIS

December 1-2,2005 BANGKOK, THAILAND

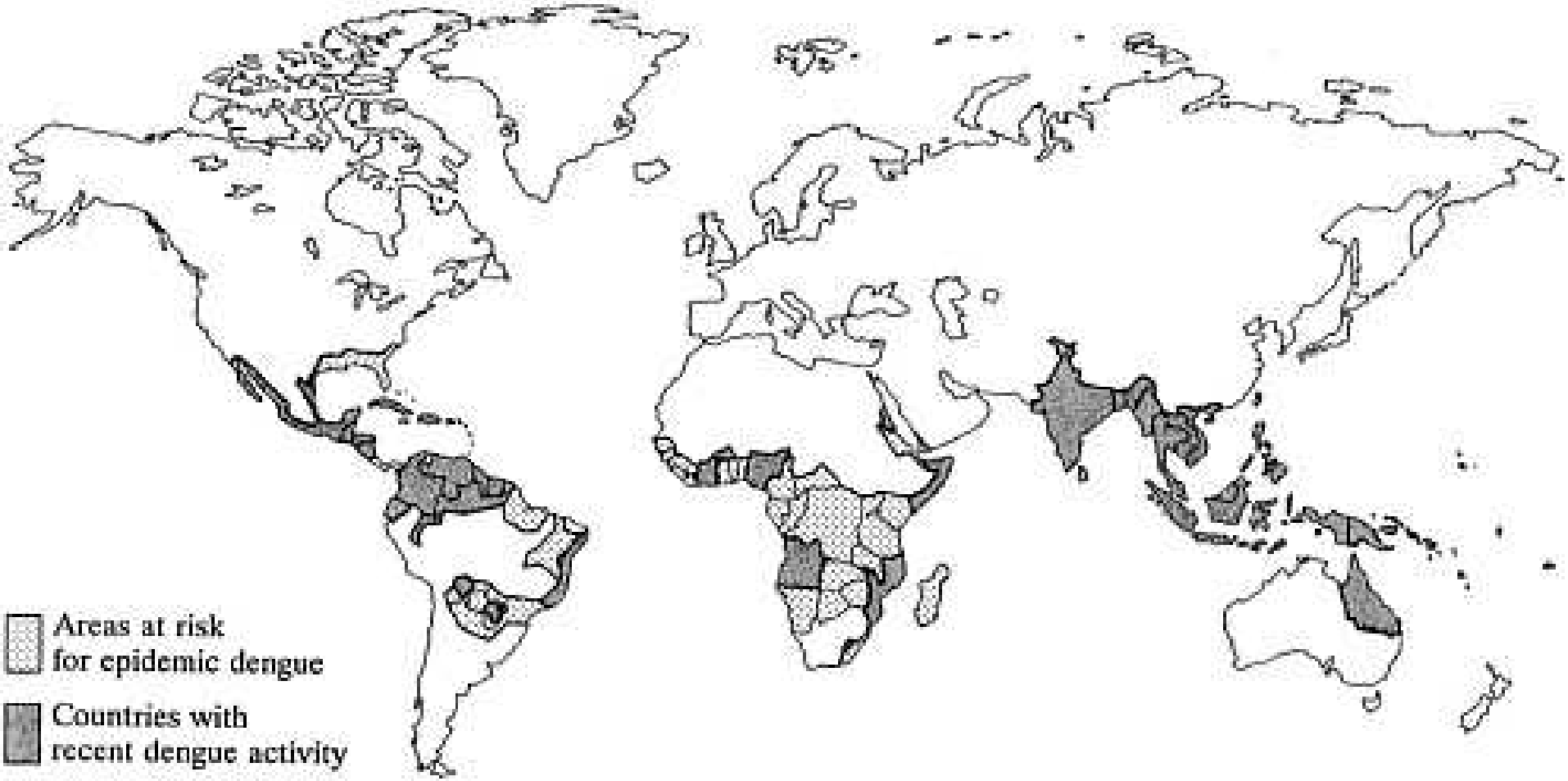
GIS for Dengue Hemorrhagic Fever in Phitsanulok,Thailand

Suchat N, Kamoltram T, Sornprasit S

Dengue Hemorrhagic Fever



Countries with recent epidemic dengue activity, the principal vector, *Aedes aegypti*.



Google Earth
File Edit View Add Tools Help
Fly To
Local Search
Directions
e.g. New York, NY
Search
Places
My Places
Sightseeing
Start your Google Earth world tour here! Click on an underlined
Google Campus
Google's Mountain View, California Campus is one of several
Grand Canyon
Double-click on "Colorado River View" to enter the
Colorado River View
Depress the left mouse button and
Layers
Layers
National Geographic Magazine
Google Earth Community
Community Showcase
Google Earth Community (Unranked)
Dining
Lodging
Banks/ATMs
Bars/Clubs
Coffee Shops
Shopping Malls
Major Retail
© 2005 National Geographic Society
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Pointer 14°04'39.34" S 111°55'03.34" E
Streaming ||||||||| 100%
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Lodging
Dining
Roads
Borders
Terrain
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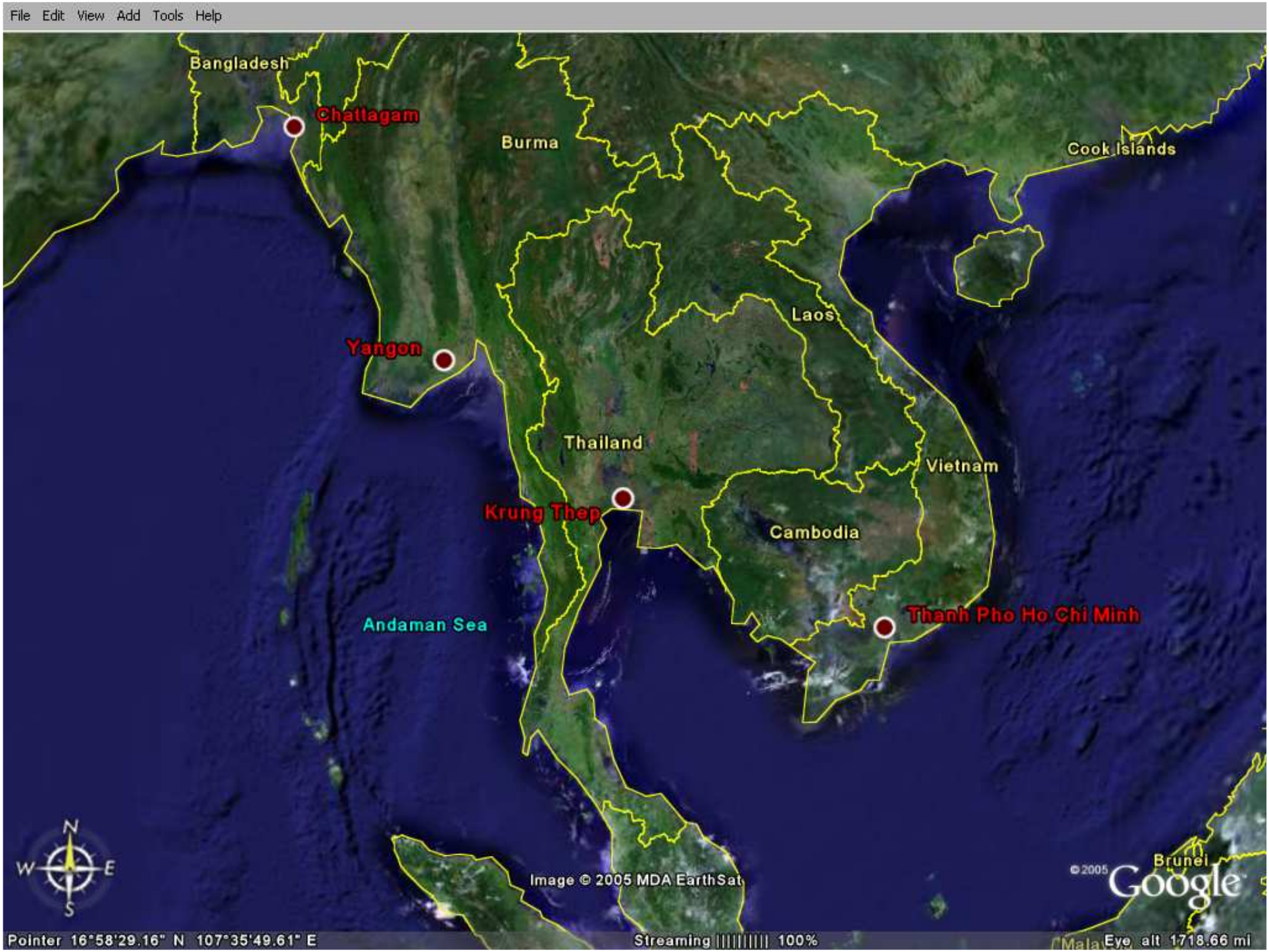
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Bangladesh
Chattagam
Burma
Cook Islands
Laos
Yangon
Thailand
Vietnam
Krung Thep
Cambodia
Thanh Pho Ho Chi Minh
Andaman Sea
Brunei
Image © 2005 MDA EarthSat
© 2005 Google
Pointer 16°58'29.16" N 107°35'49.61" E
Streaming 100%
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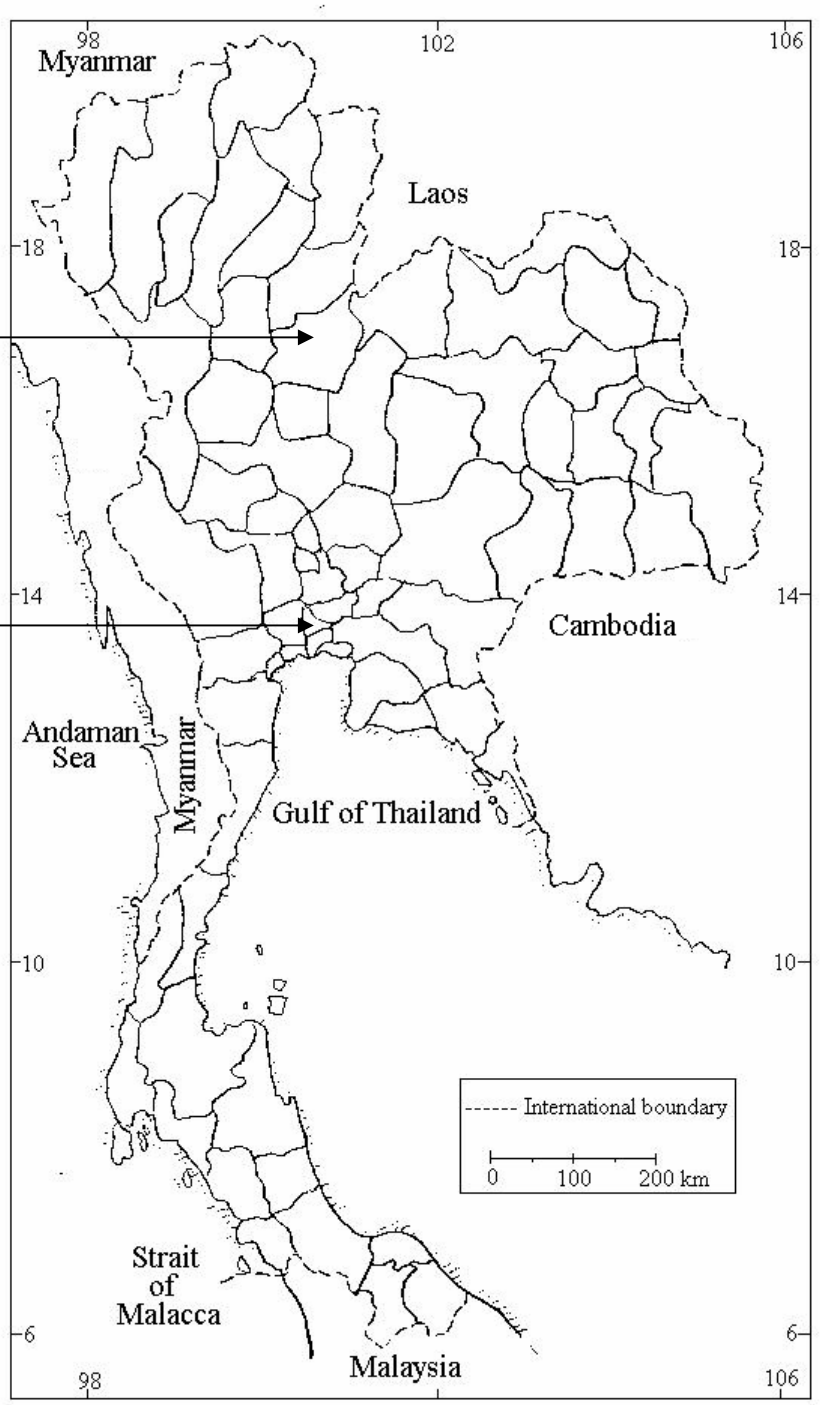
- **Phitsanulok** is located in lower northern part of Thailand.
- **Phitsanulok** is 377 kms. by road from Bangkok.

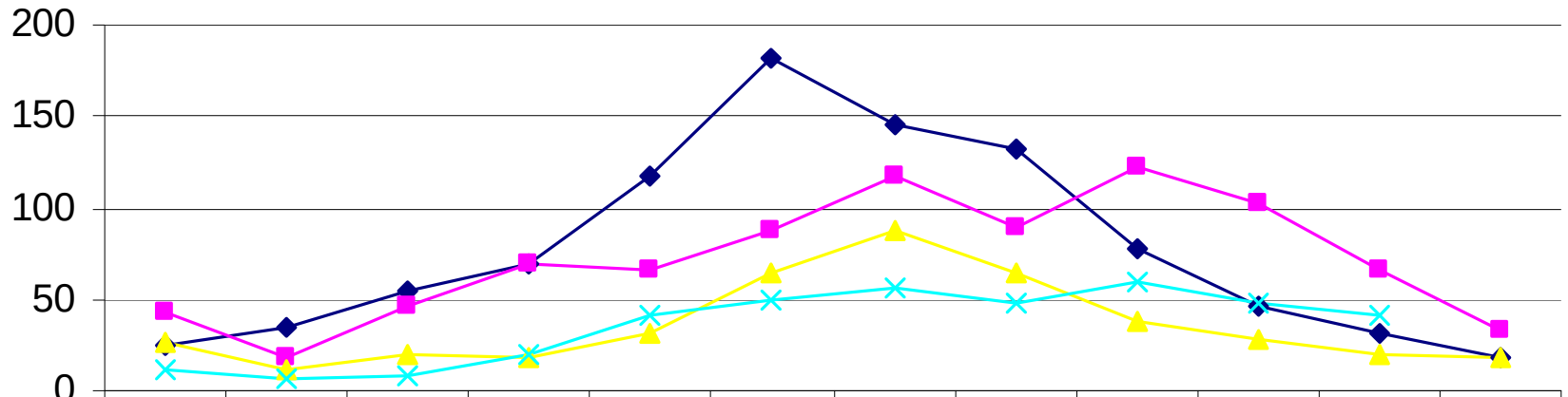
Phitsanulok

Bangkok



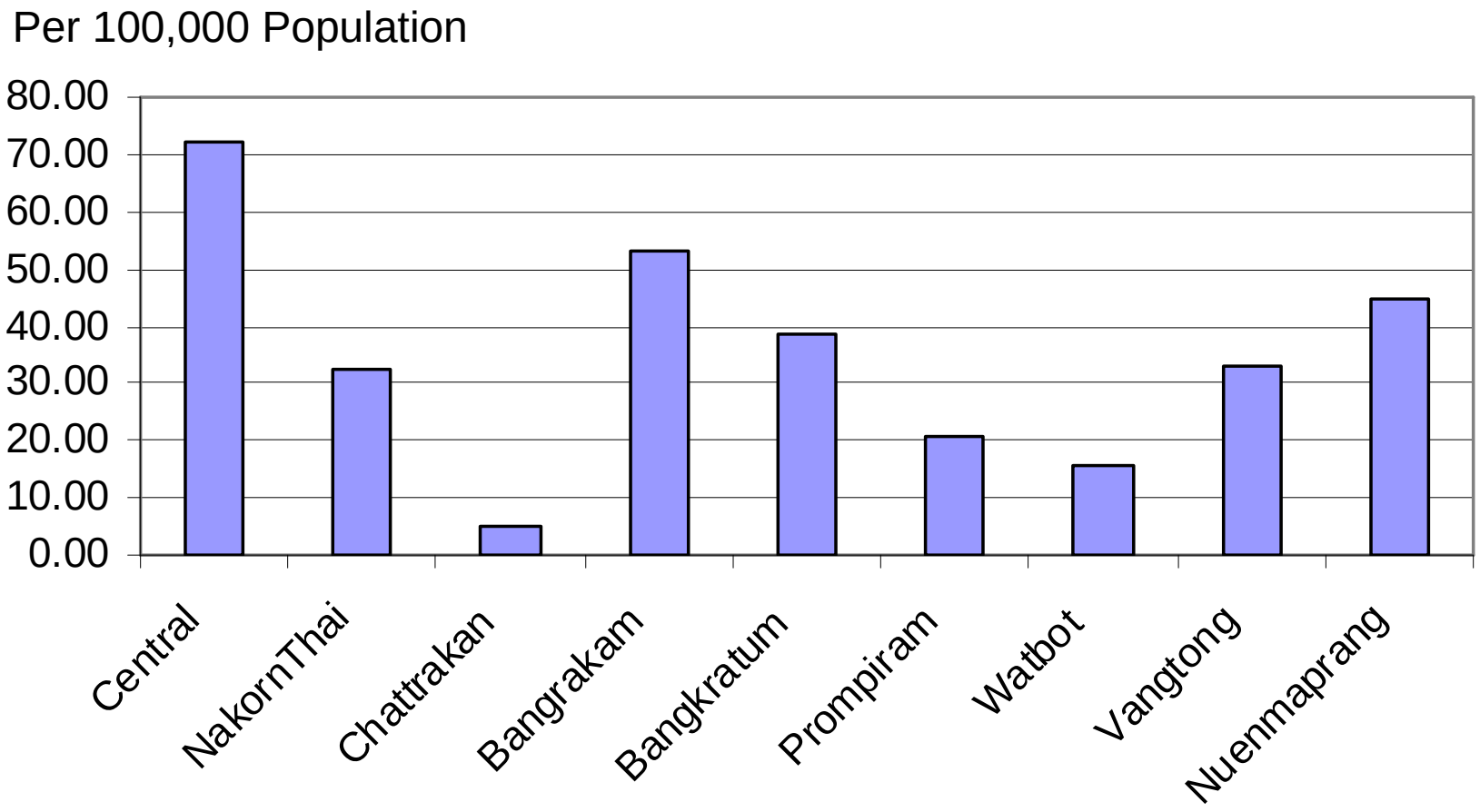
Phitsanulok

DHF (cases) in Phitsanulok 2003-2005 and Median 2001-2005

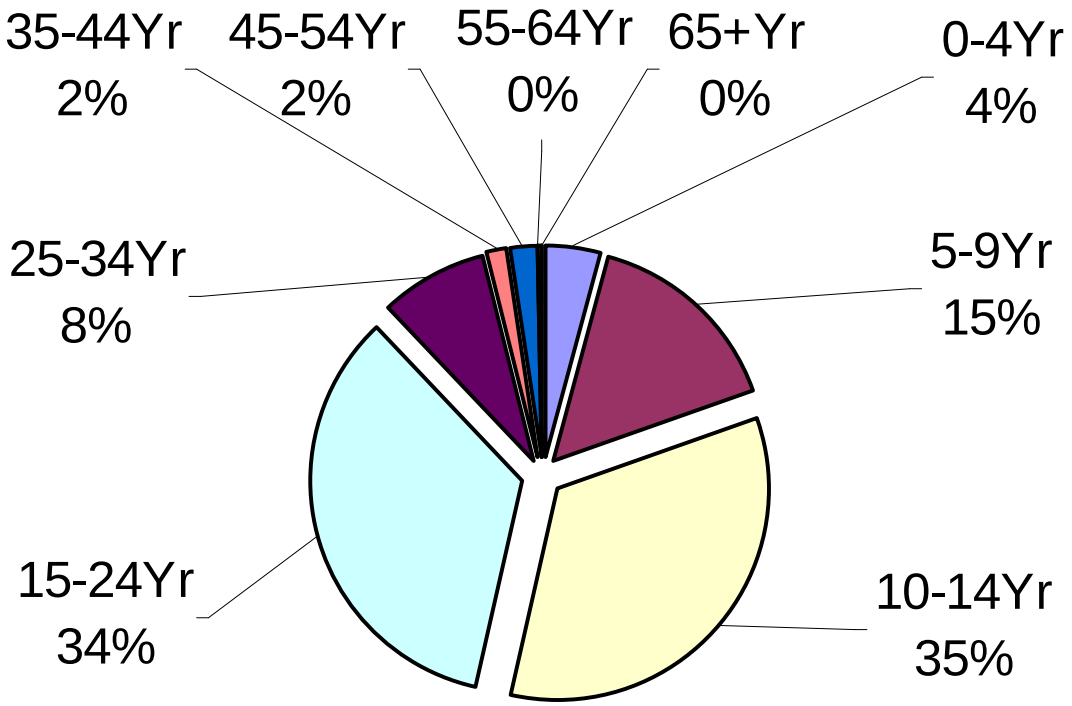


	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Median	25	34	54	70	118	181	146	132	78	46	32	19
2003	43	19	46	69	66	88	118	89	123	103	66	33
2004	26	12	20	19	31	64	88	64	38	28	20	19
2005	11	7	8	20	42	49	57	48	60	48	41	

DHF, incidence rate in 9 districts, Phitsanulok, Thailand, 2005



DHF in specific age groups Phitsanulok, Thailand, 2005



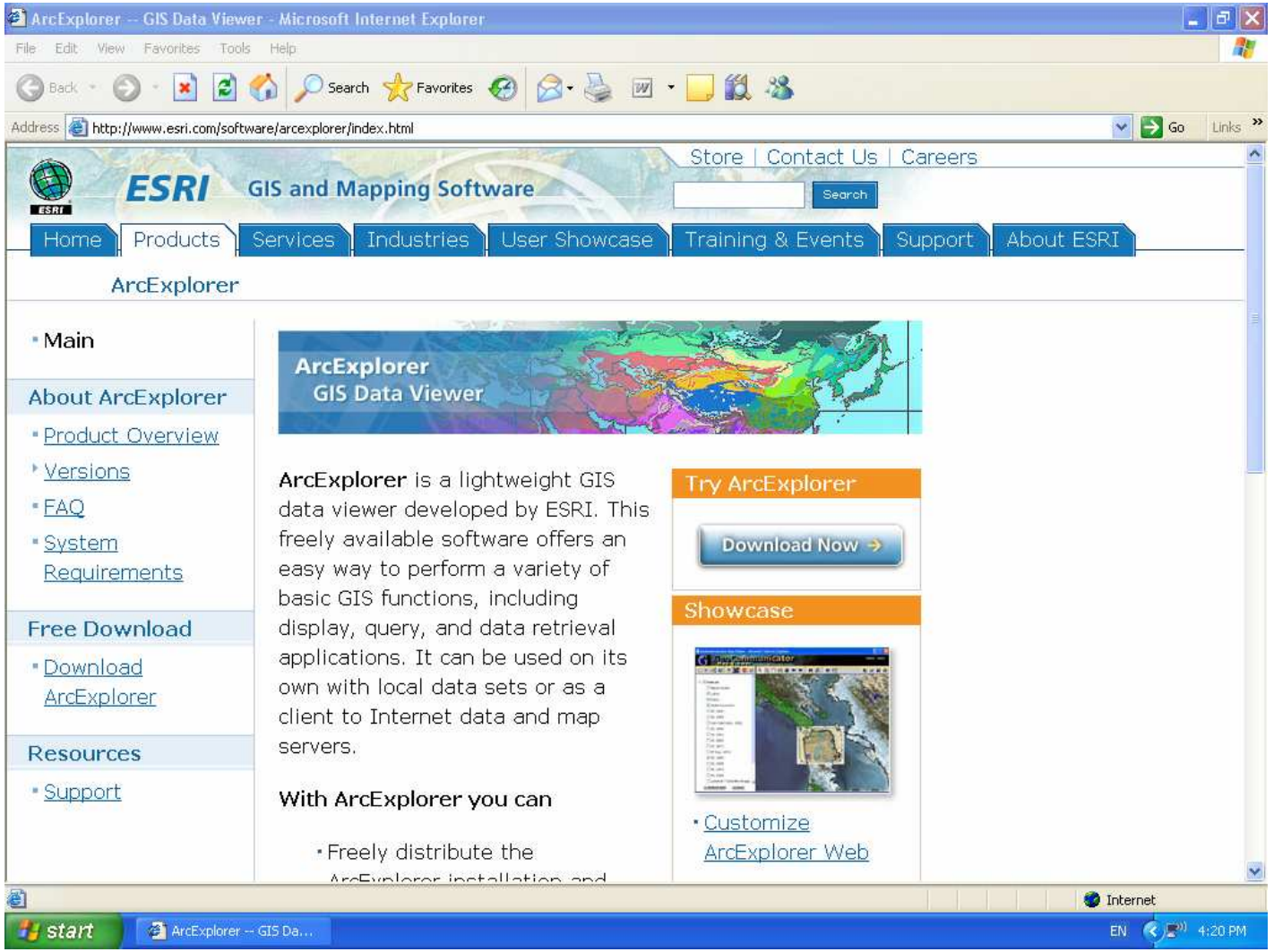
Phitsanulok

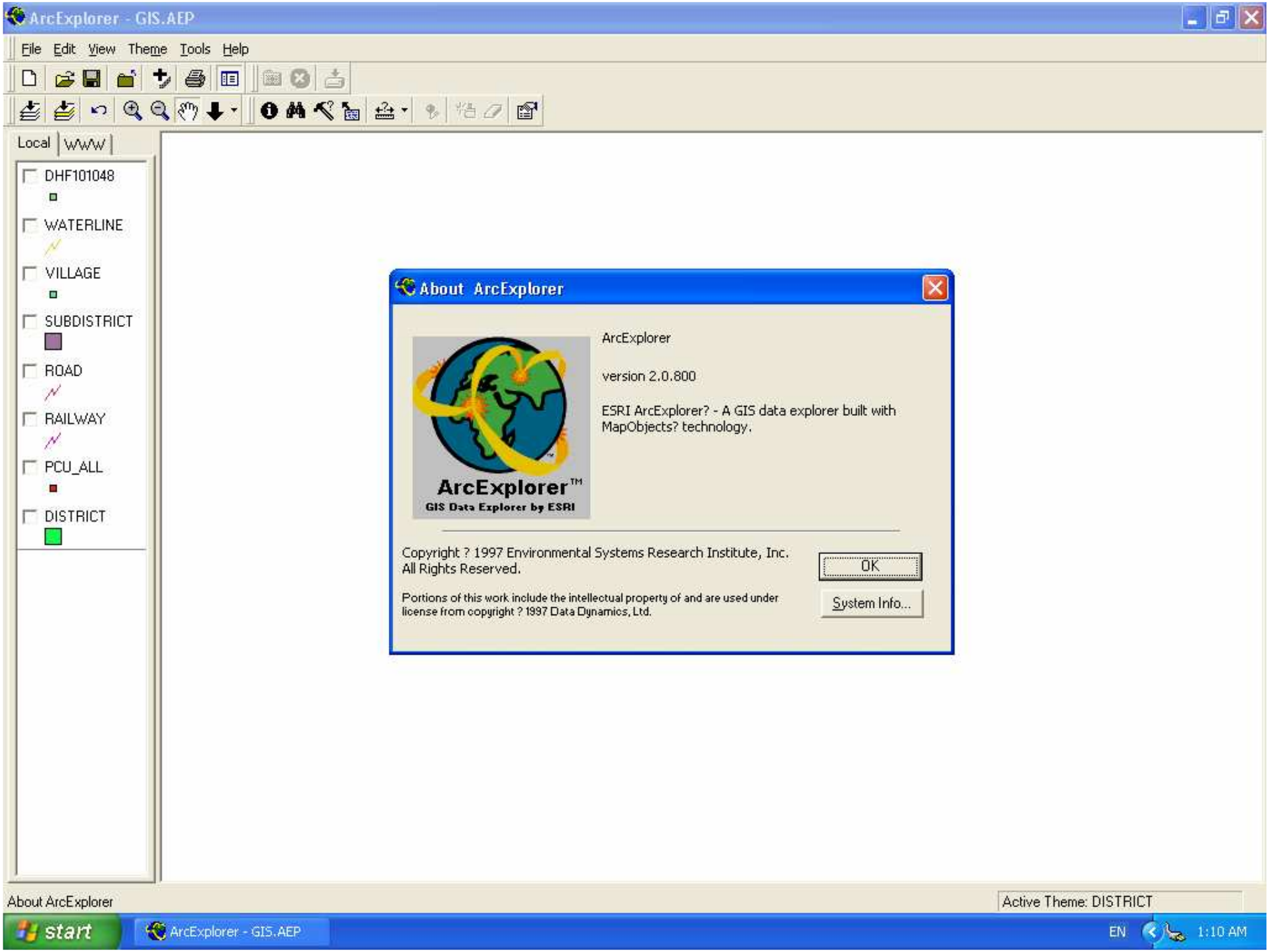
- 9 Districts
- 93 Sub Districts
- 1,032 Villages

ArcExplorer by ESRI

- is a GIS data viewer developed by ESRI. This freely available software offers an easy way to perform a variety of basic GIS functions, including display, query, and data retrieval applications. It can be used on its own with local data sets or as a client to Internet data and map servers.

ArcExplorer by ESRI




ArcExplorer - GIS.AEP
File Edit View Theme Tools Help
Local WWW
DHF101048
WATERLINE
VILLAGE
SUBDISTRICT
ROAD
RAILWAY
PCU_ALL
DISTRICT
About ArcExplorer
ArcExplorer
version 2.0.800
ESRI ArcExplorer? - A GIS data explorer built with MapObjects? technology.
ArcExplorer™
GIS Data Explorer by ESRI
Copyright ? 1997 Environmental Systems Research Institute, Inc.
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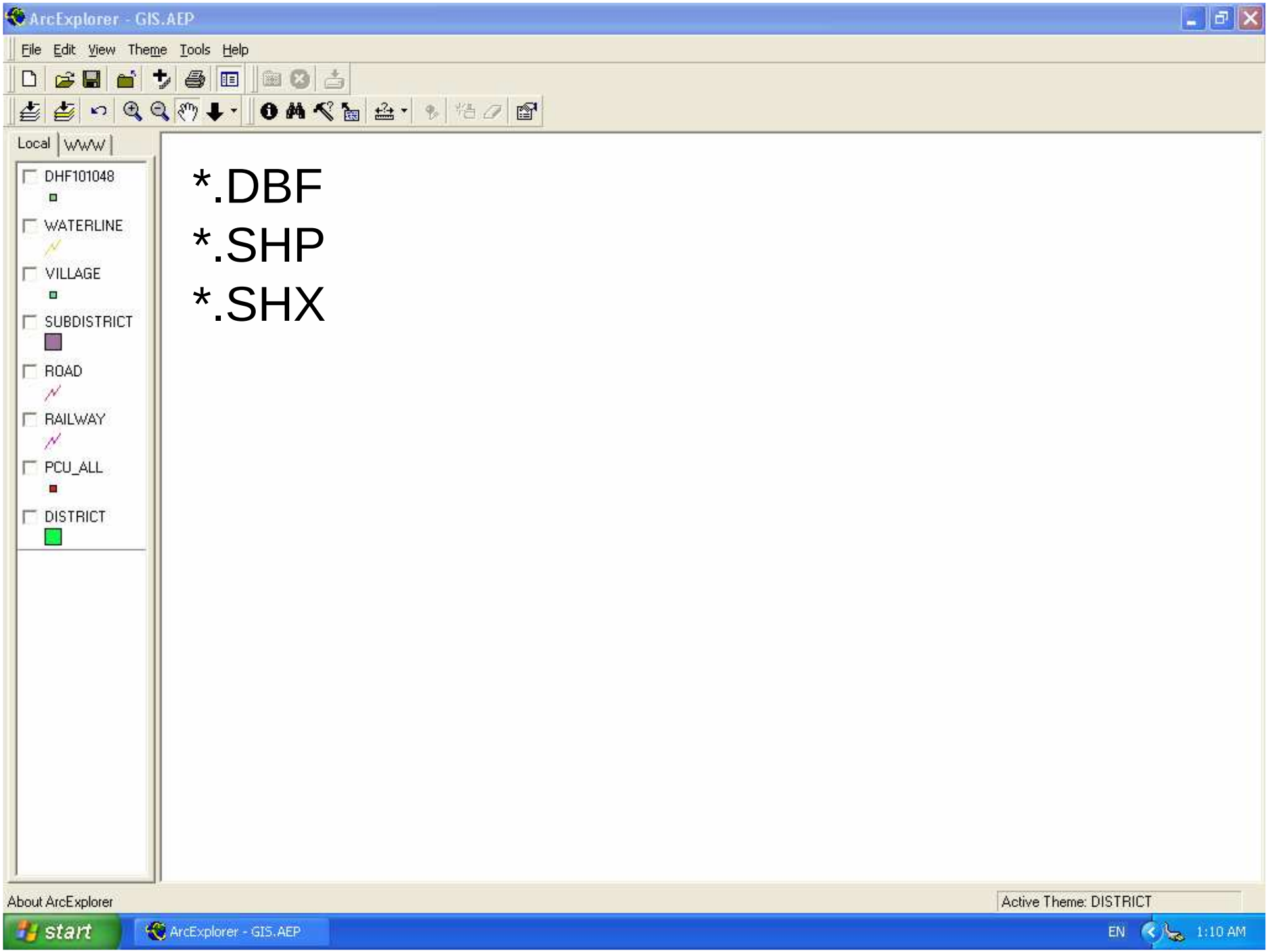
ArcExplorer - GIS.AEP
File Edit View Theme Tools Help
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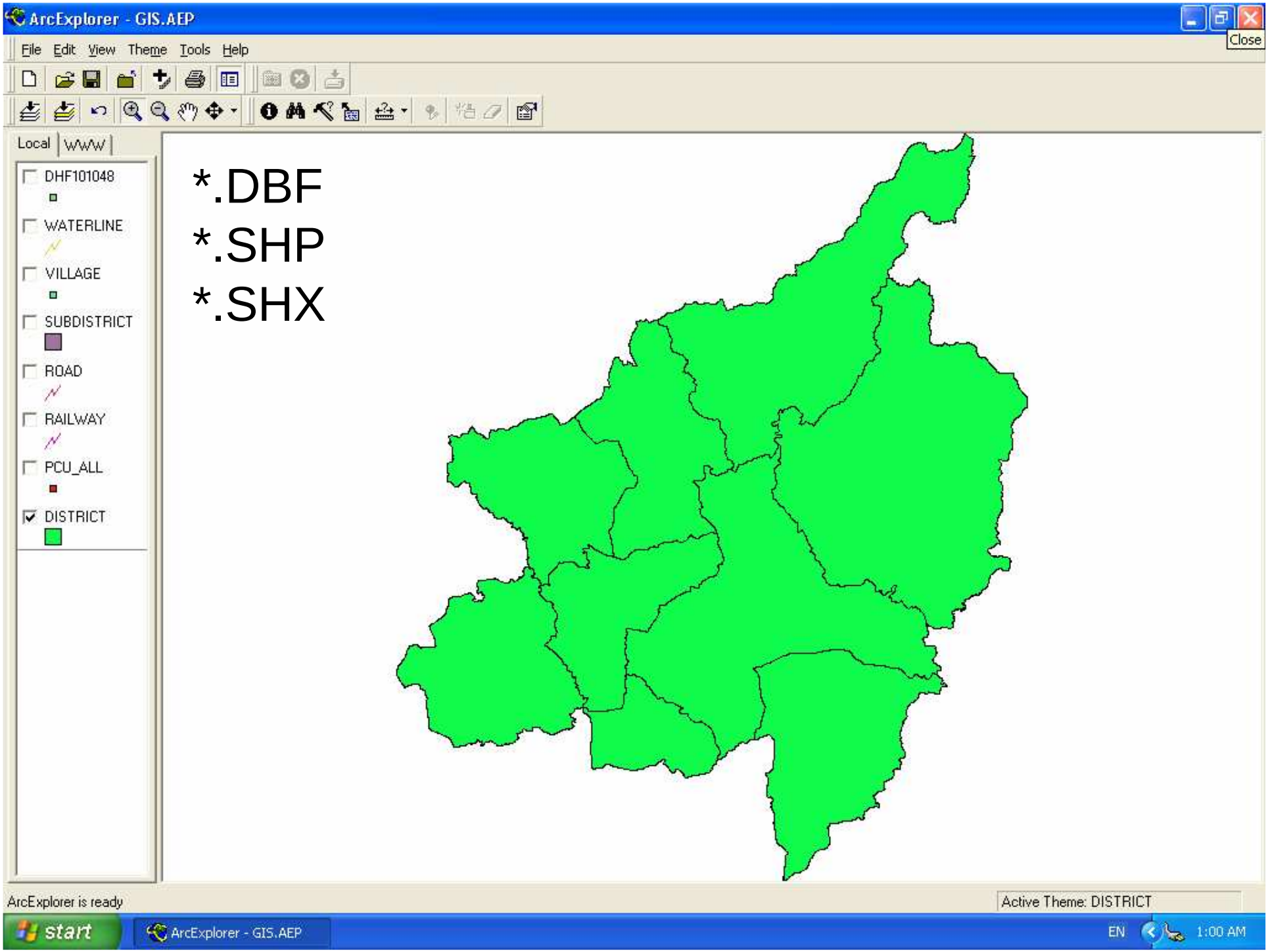
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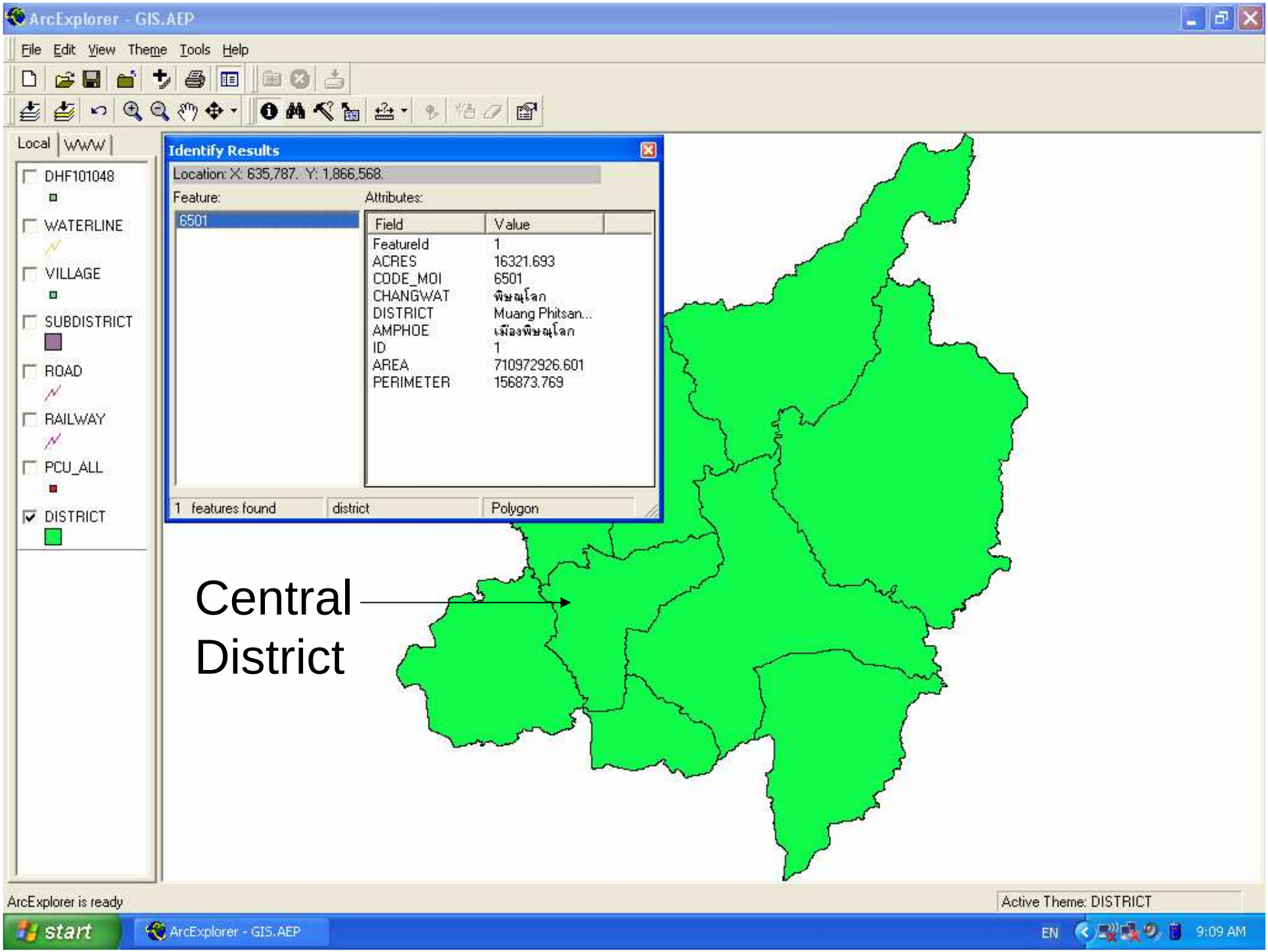
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File Edit View Theme Tools Help
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Identify Results
Location: X: 635,787. Y: 1,866,568.
Feature:
Attributes:
6501
Field Value
FeatureId 1
ACRES 16321.693
CODE_MOI 6501
CHANGWAT พิษณุโลก
DISTRICT Muang Phitsan...
AMPHOE เมืองพิษณุโลก
ID 1
AREA 710972926.601
PERIMETER 156873.769
1 features found
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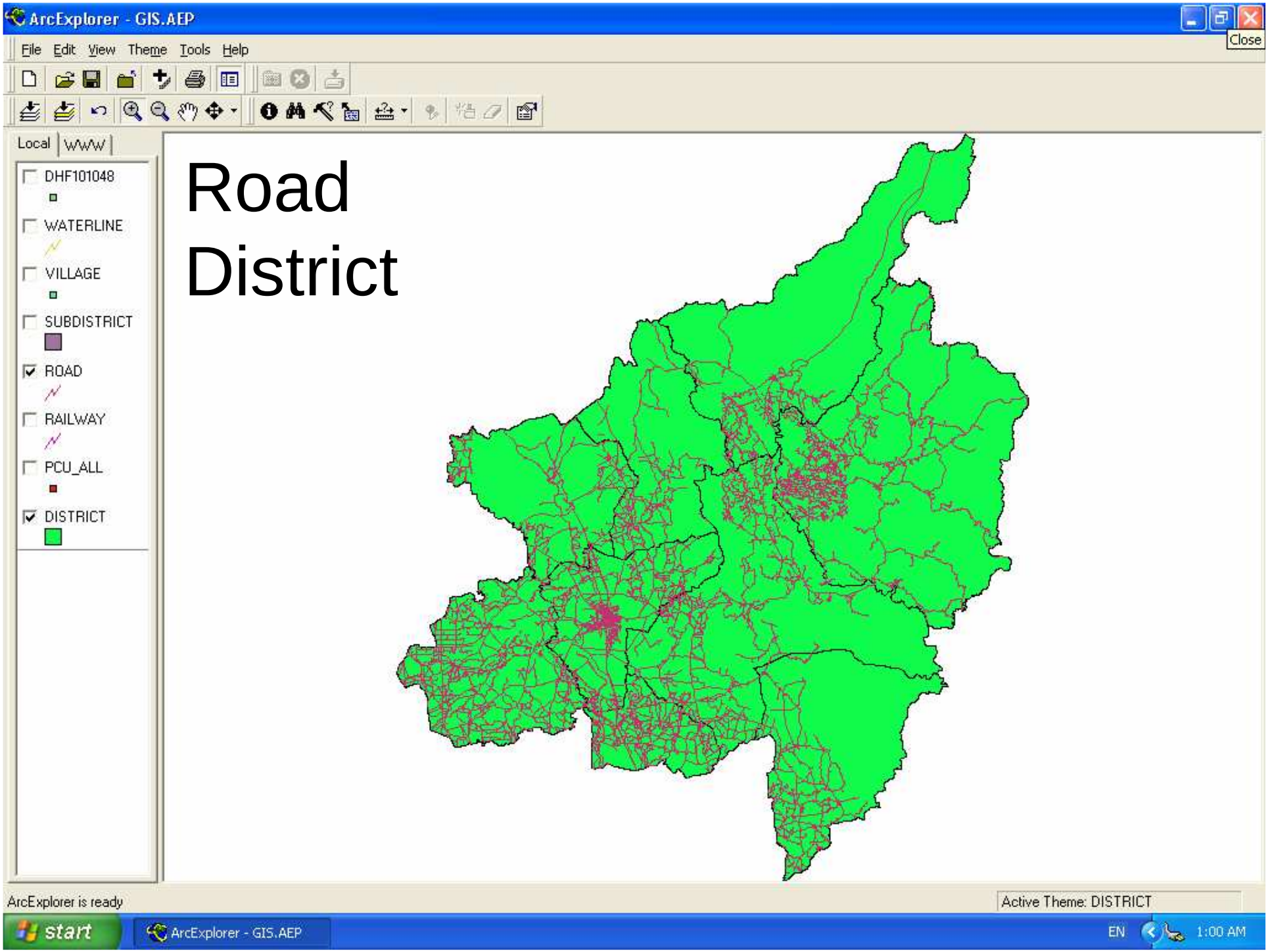
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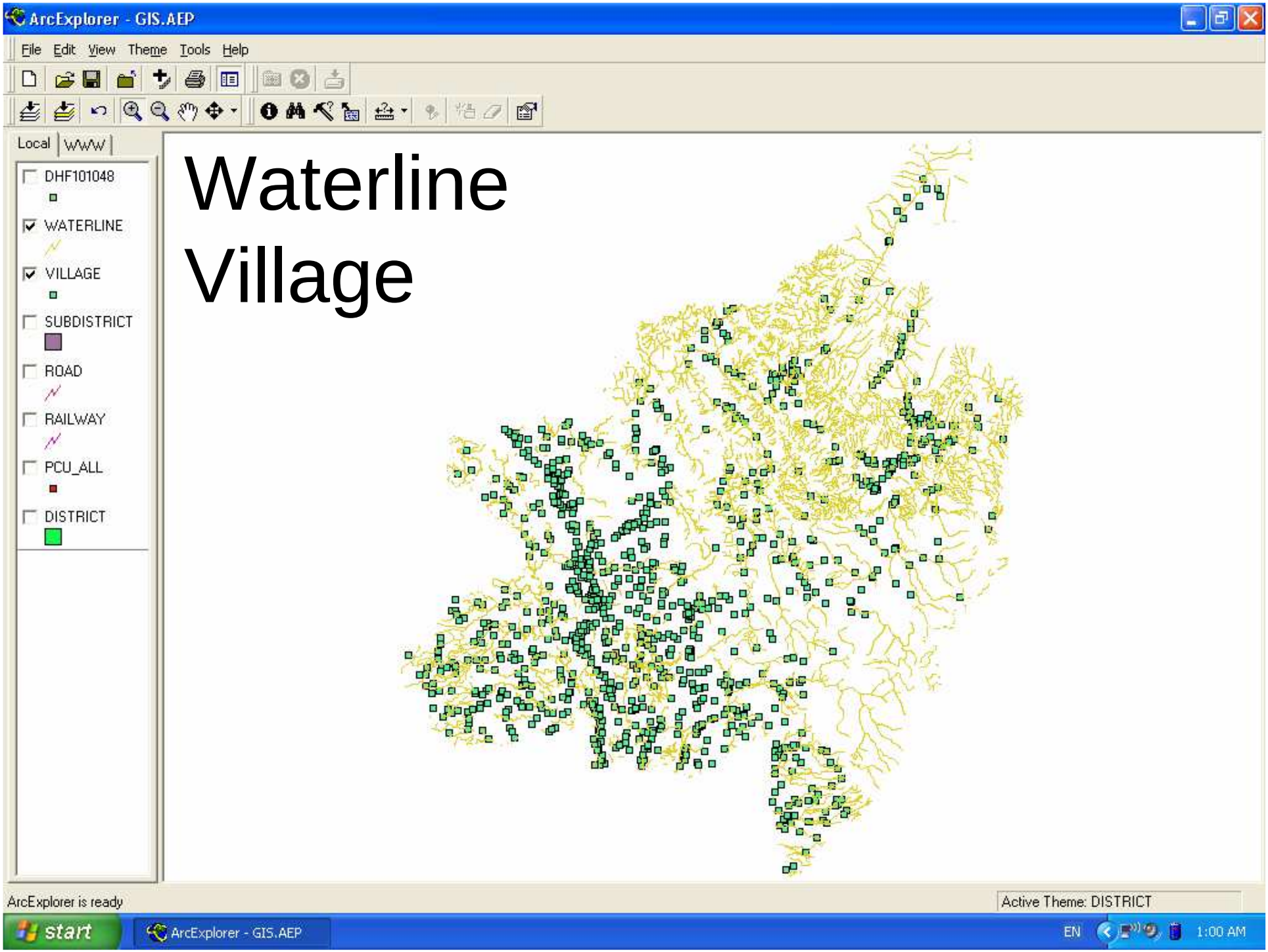
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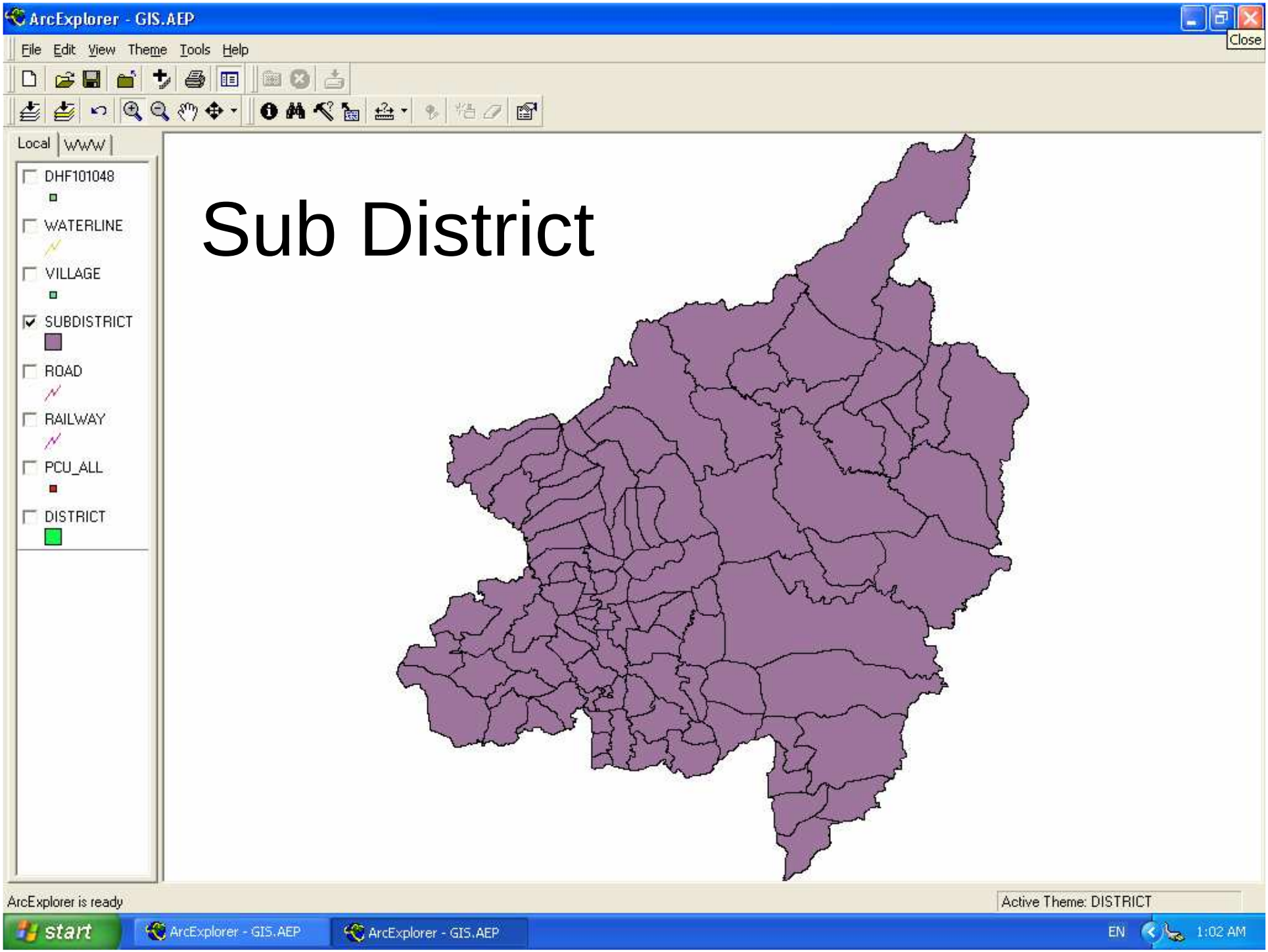
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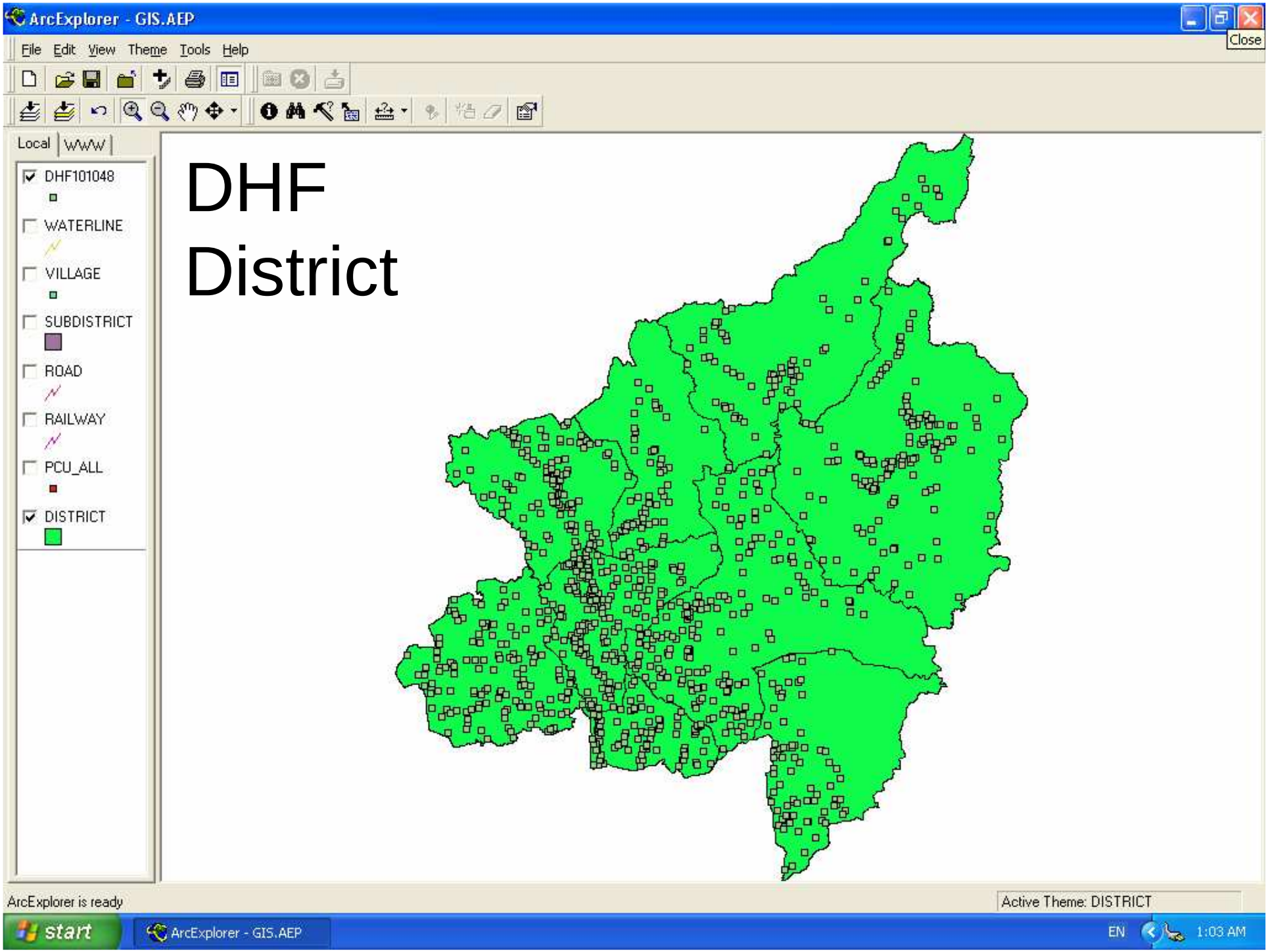
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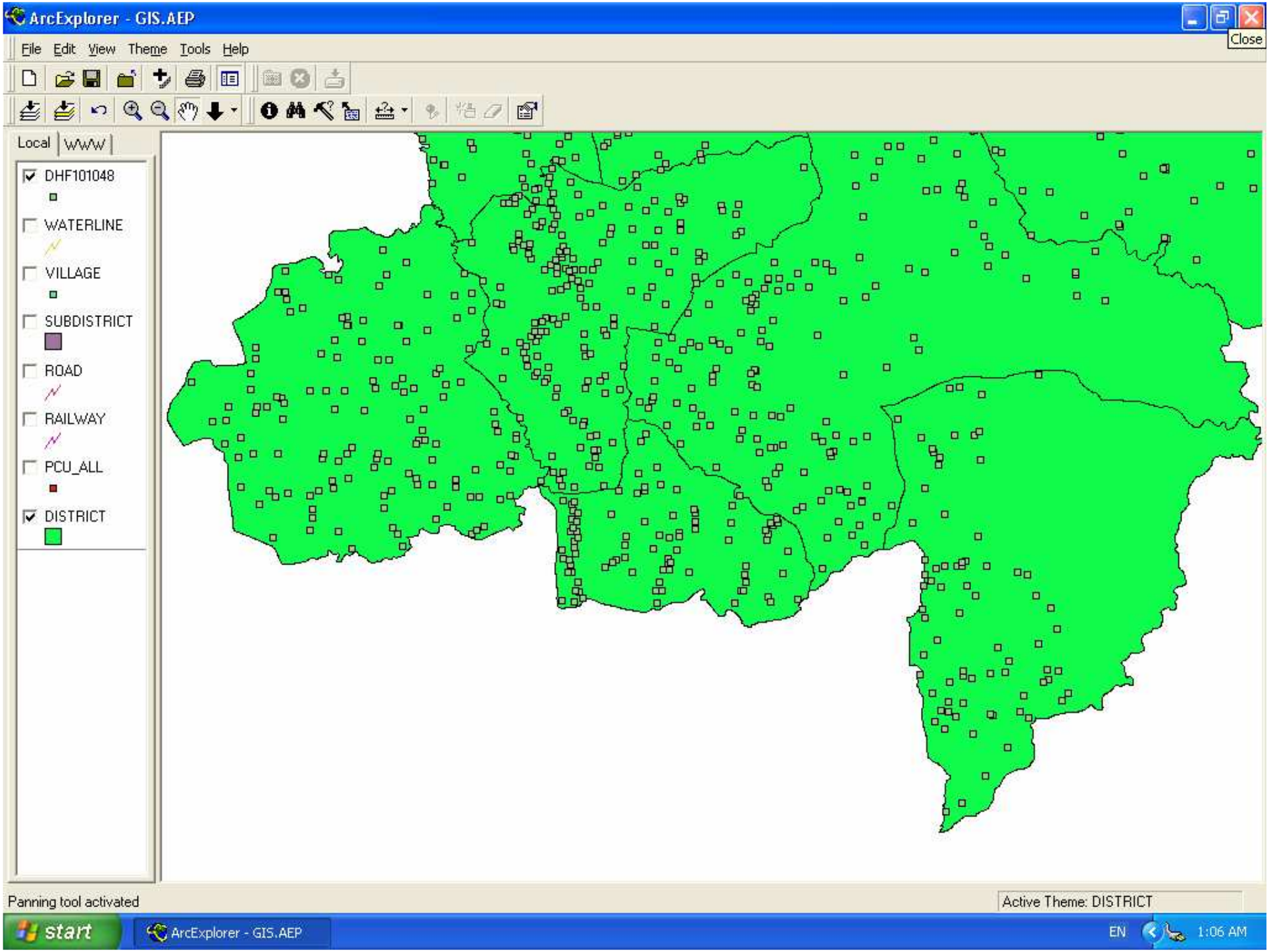
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File Edit View Theme Tools Help
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SUBDISTRICT
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PCU_ALL
DISTRICT
Panning tool activated
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start
ArcExplorer - GIS.AEP
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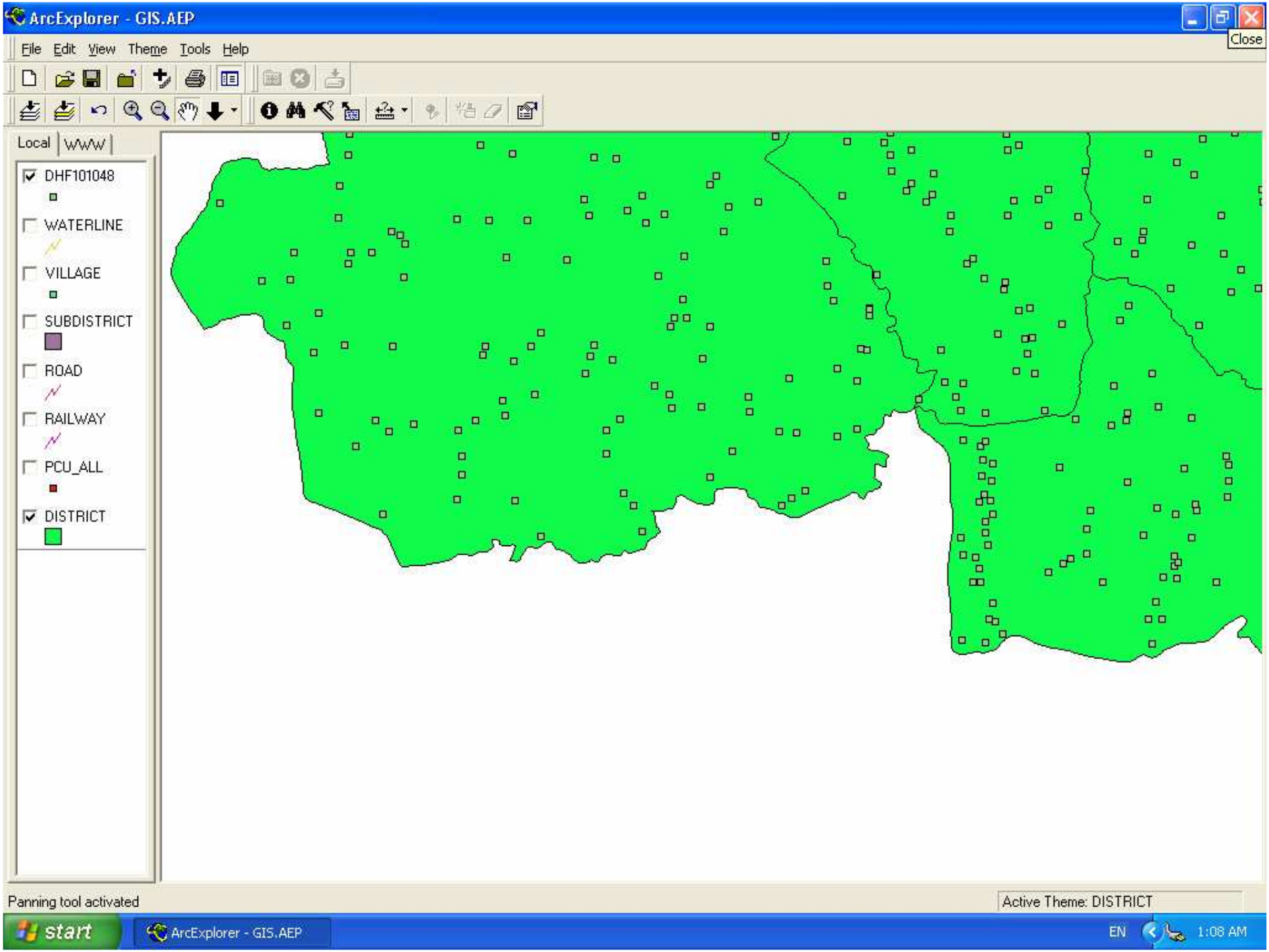
1:06 AM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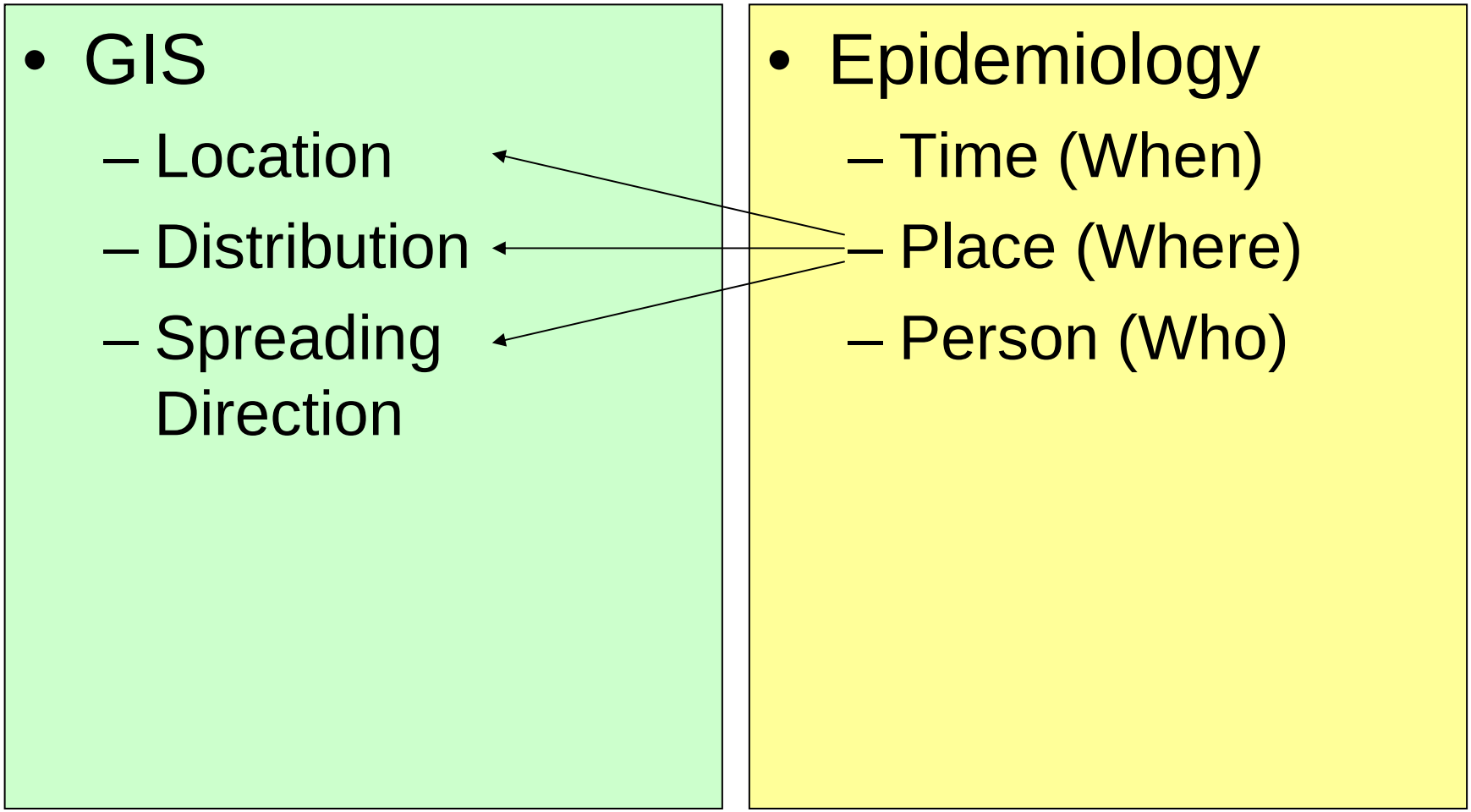
GIS and Epidemiology



View, understand, question, interpret, and visualize data

- GIS allows us to view, understand, question, interpret, and visualize data in ways simply not possible in the rows and columns of a spreadsheet.

Mosquito control

HI and CI

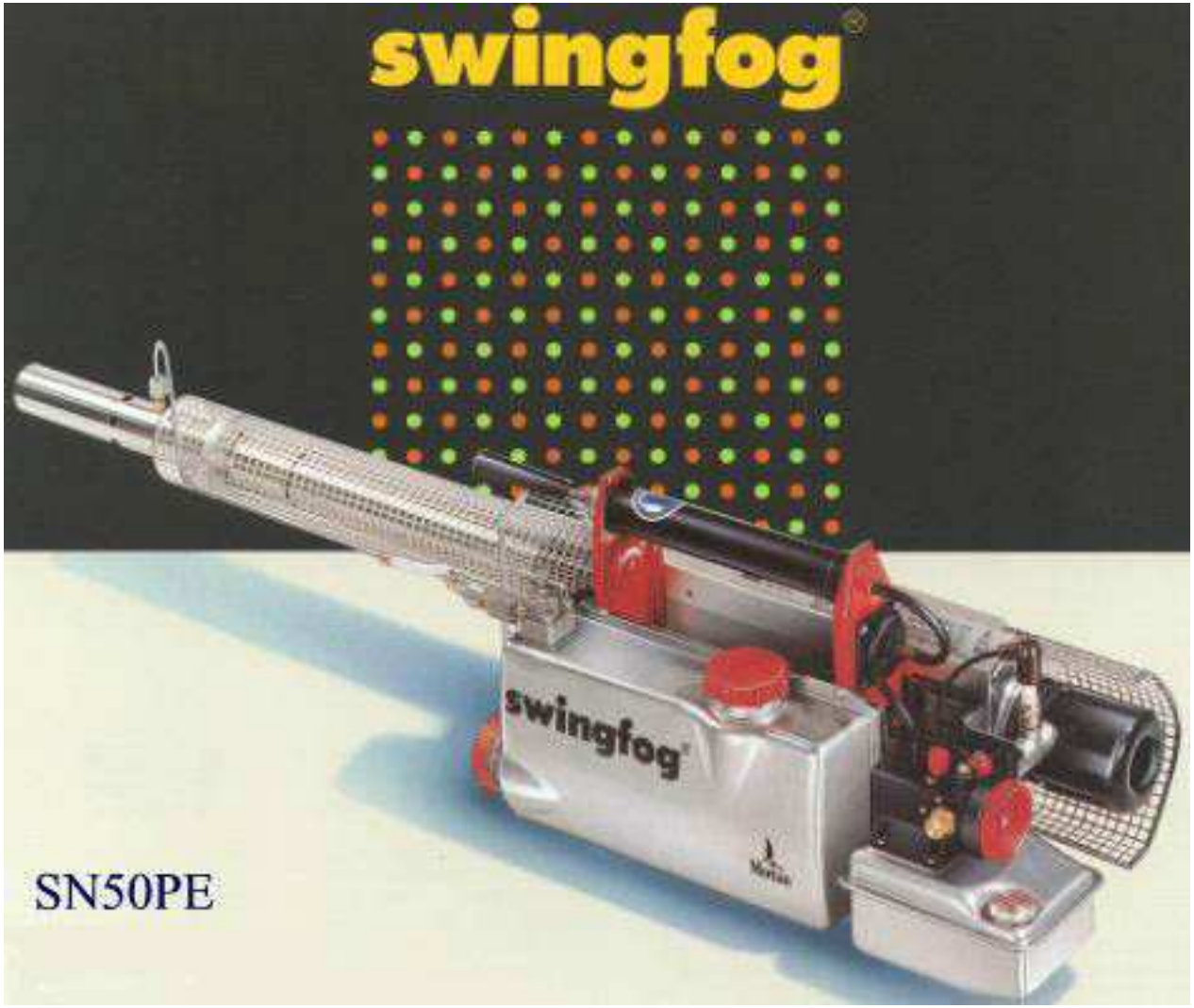
- In community,
  House Index < 10

- In hospital and schools,
  Container Index = 0

Primary school students, volunteer to get rid of larva of mosquitoes

Inspected by health volunteer that they are no mosquito larva in houses, villages, and schools

Swingfog



Thank You