An Excerpt from "The Rock" by T.S. Elliot

Knowledge of speech, but not of silence
Knowledge of words, and ignorance of the Word,
All our knowledge brings us nearer to our ignorance
All our ignorance brings us nearer to death
But nearness to death, no nearer to God.
Where is the life we have lost in living?
Where is the wisdom we have lost in knowledge
Where is the knowledge we have lost in information?

Resource Management, Private-Public Partnership, and Knowledge Sharing

Thematic Conceptual Links

Alexander G. Flor
SEARCA Knowledge Management Program
agf@agri.searca.org

Assumptions on Sustainable NRM

- Sustainable NRM is a function of people's participation or private-public partnerships (UNDP-FAO, 1978)
- Private-public partnership has four pillars: LGUs, NGOs, the business sector, & civil society (Asian Institute of Management, 1999)
- Knowledge sharing strengthens civil society and social capital formation
- Knowledge management provide tools for sustainable NRM

Propositions on Unsound NRM

- Poverty is caused by unsound NRM
- Unsound NRM may be attributed to economic, technological, cultural, and social structure factors
- Poverty is correlated with the lack of access to information/ knowledge
- Factors causing unsound NRM may be addressed by knowledge sharing and reuse

Poverty in Asia

- Close to 900 million Asians live on less than US$1/ day
- One out of three Asians is poor
- Poverty reduction trends have consistently worsened for the past fifty years: financial crisis; population growth; depletion of natural resource

Major Paradigms in Analyzing Poverty

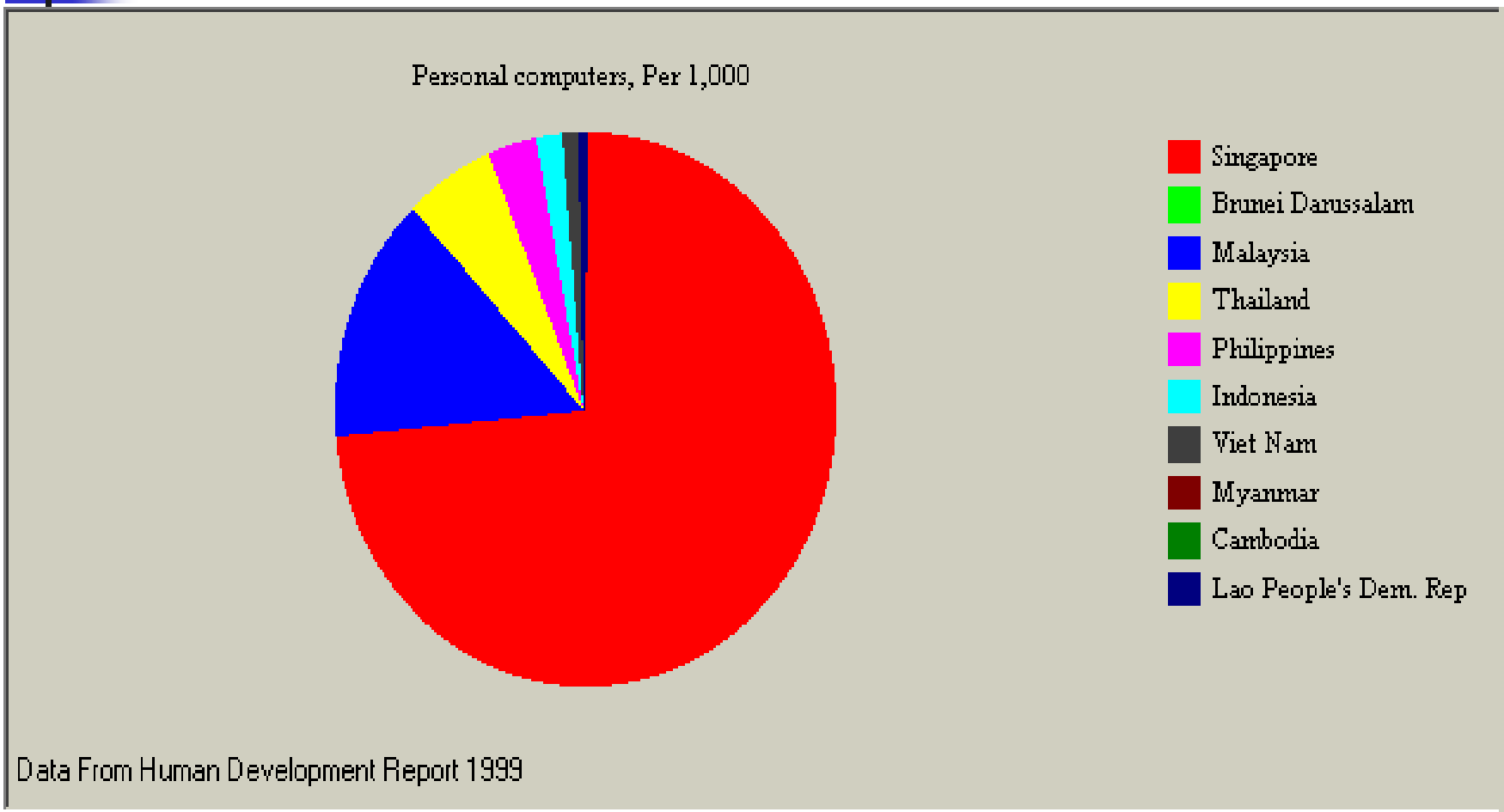
- *Social Structural* - poverty is a function of the social structure, the “System” or “Establishment”
- *Cultural* - poverty is a function of culture, social values or national character
- *Economic* - poverty is caused by the lack of sound fiscal/monetary policy; requires market corrections through LMPs & other social protection schemes
- *Technological* - primary cause of poverty is the lack of technology or “know how”

Correlates of ICT & Poverty: The Case of Southeast Asia

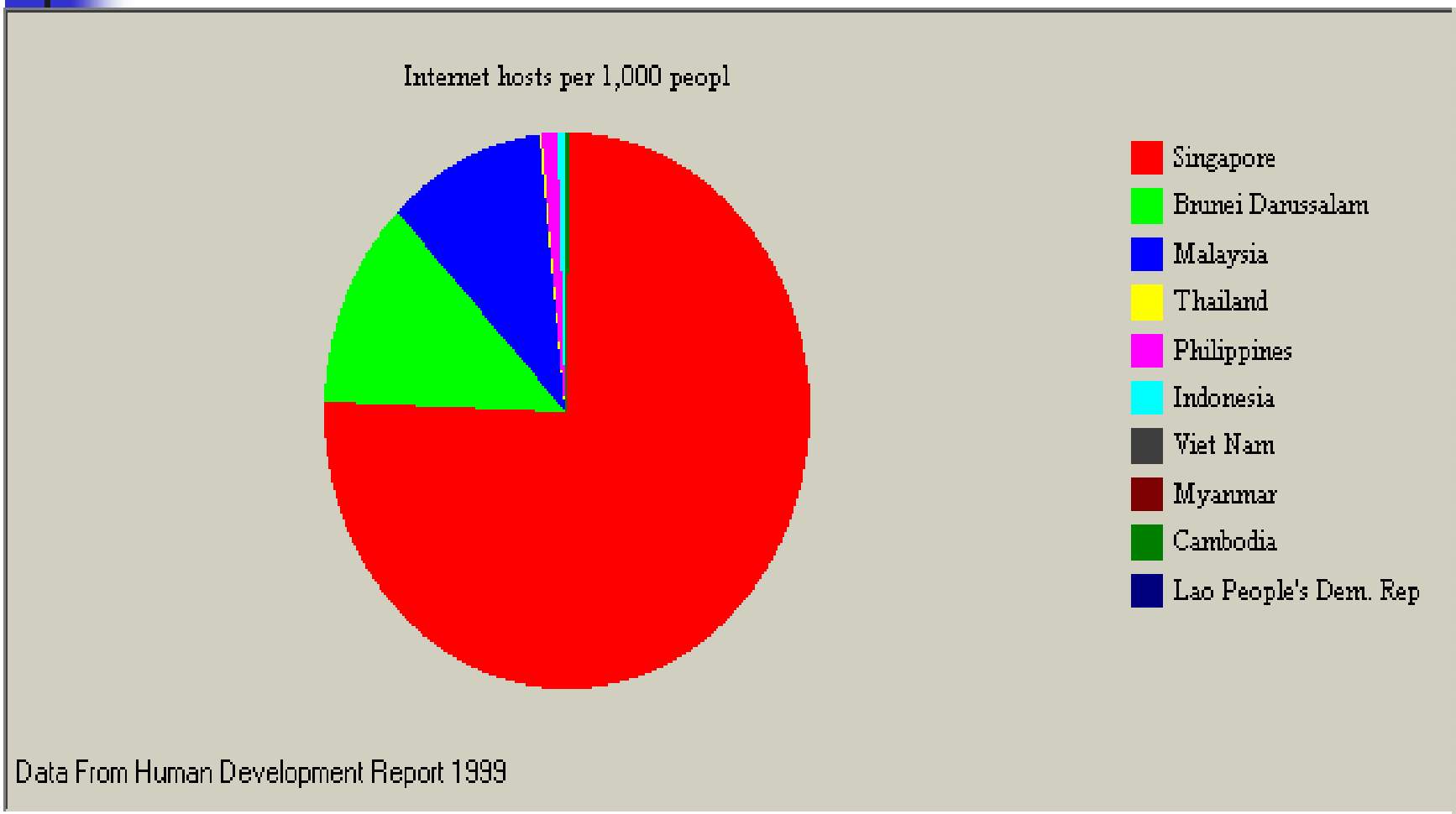
- Human Poverty Index
- PC Ownership
- Internet Penetration
- Telephone Density
- TV Ownership

(Based on Data from the UNDP Human Development Report 1999)

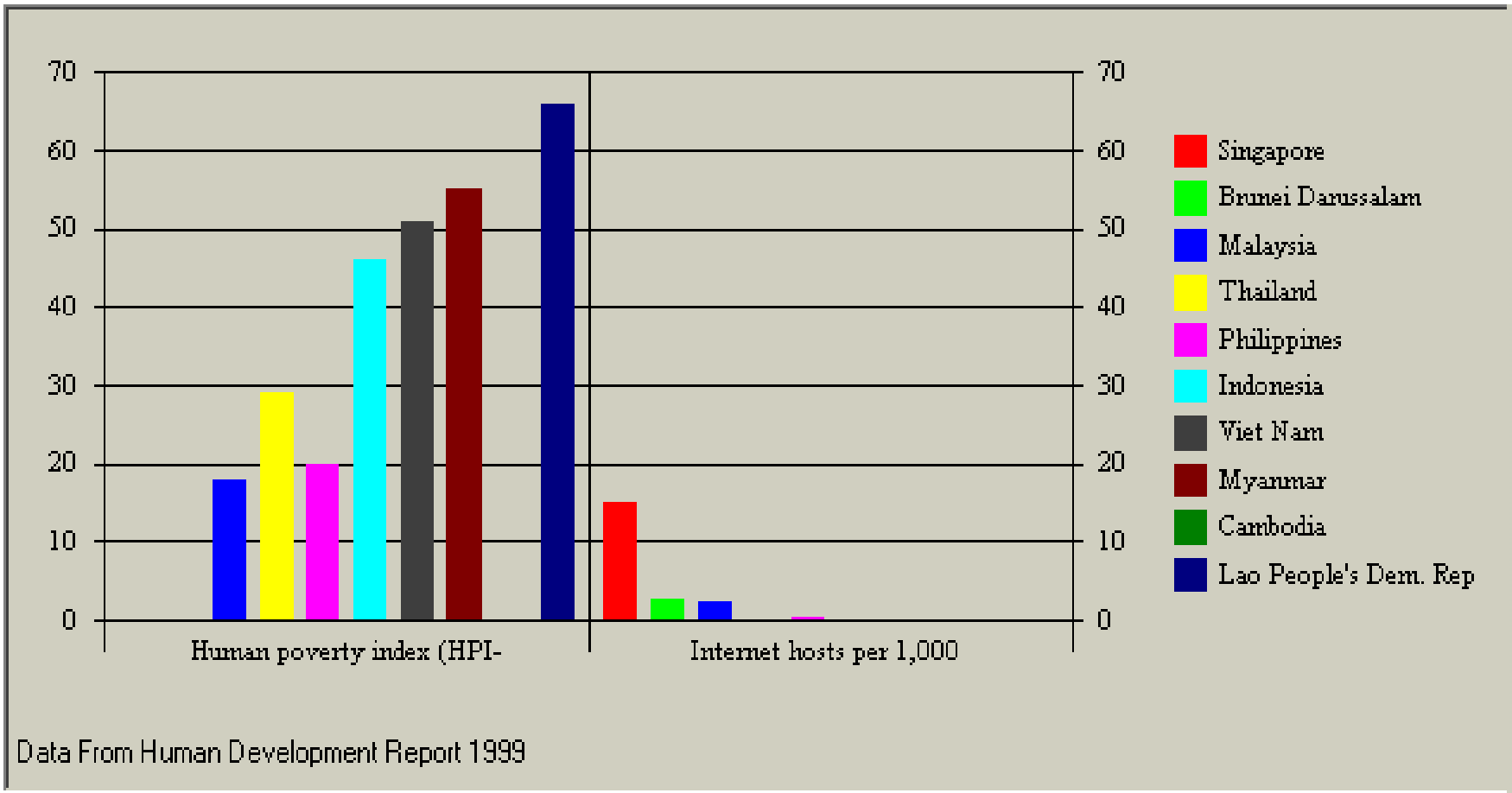
Pie Chart of PC Ownership in SEA



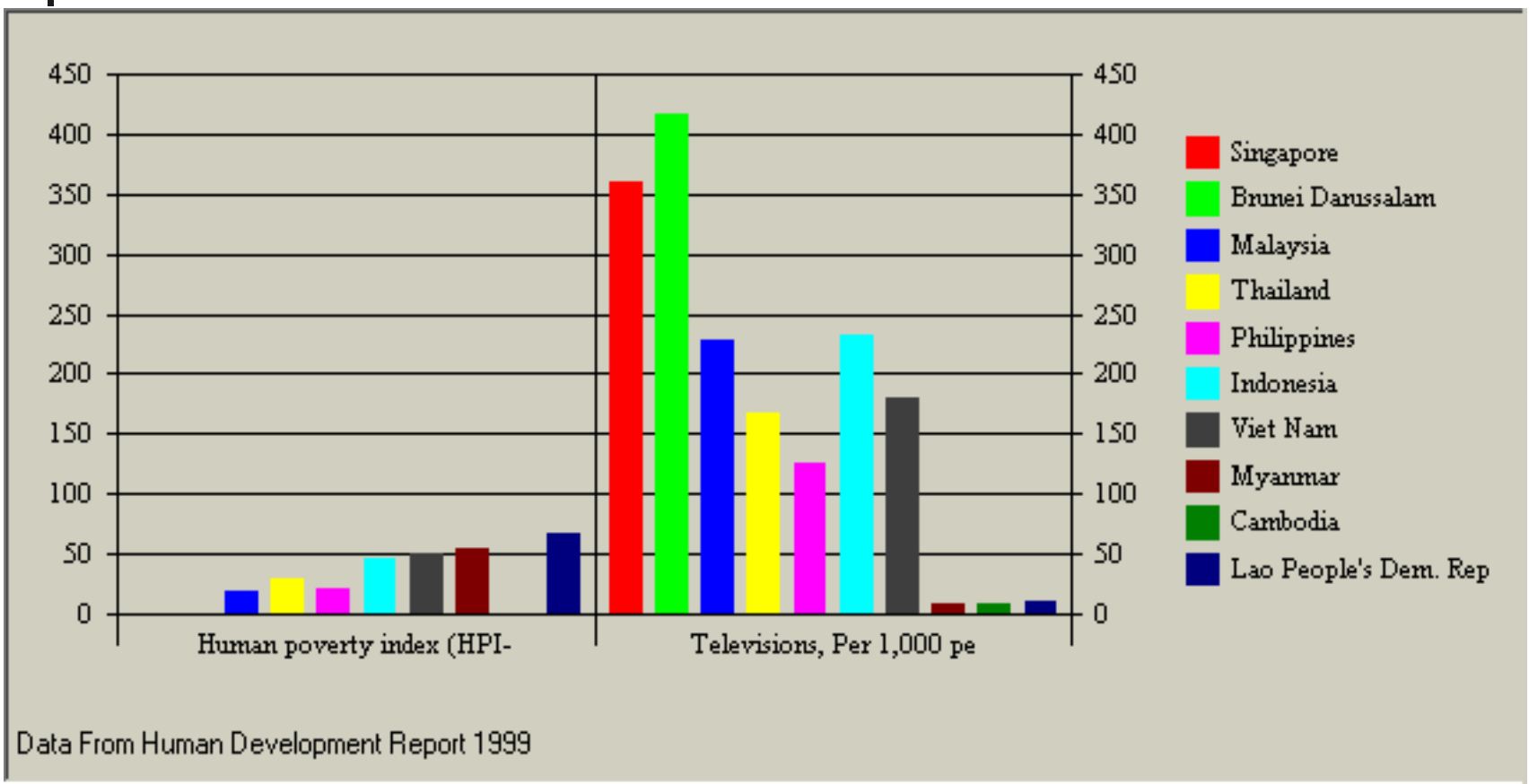
Pie Chart of Internet Penetration in SEA



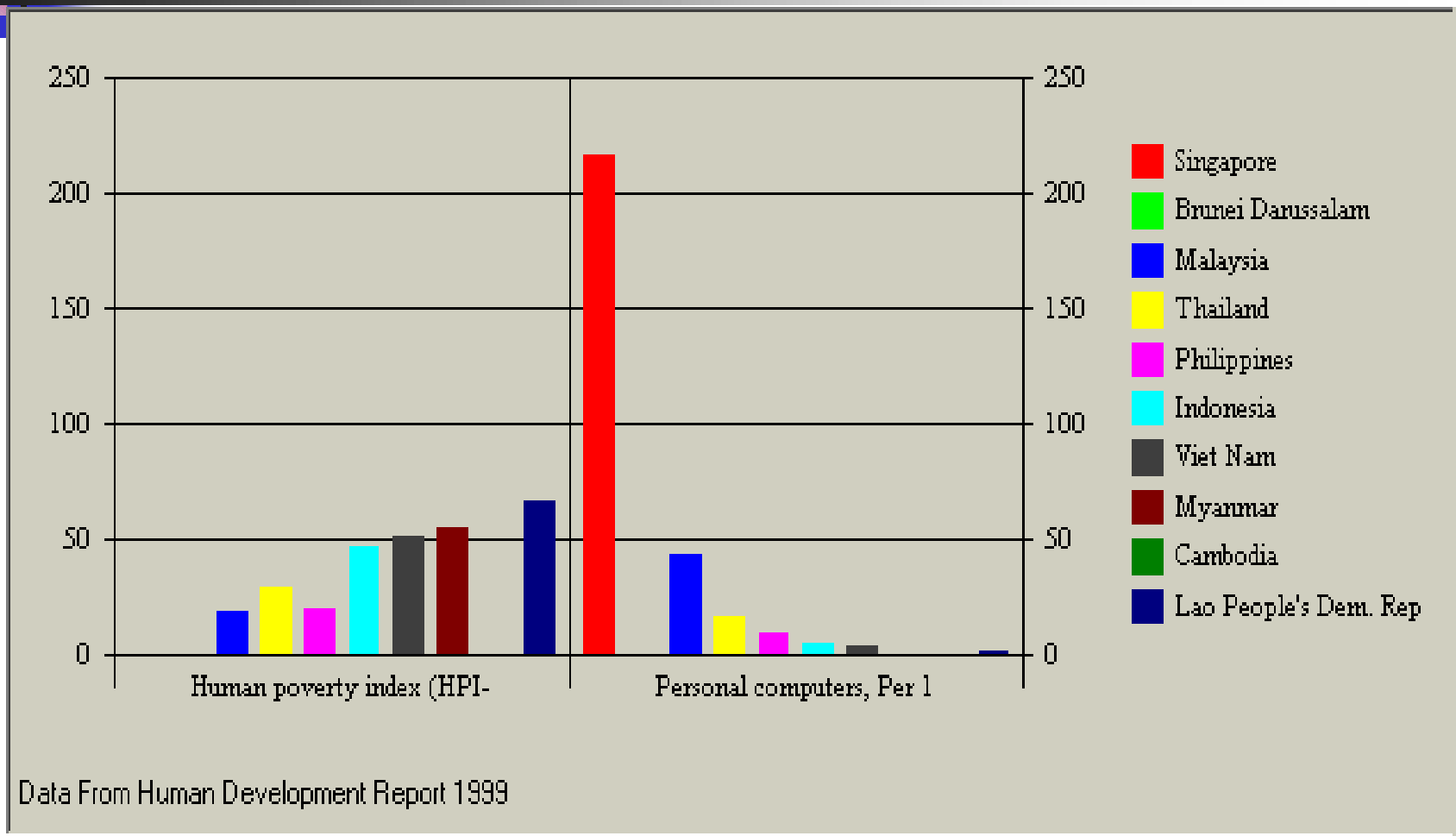
Bar Chart: Poverty & Internet Penetration



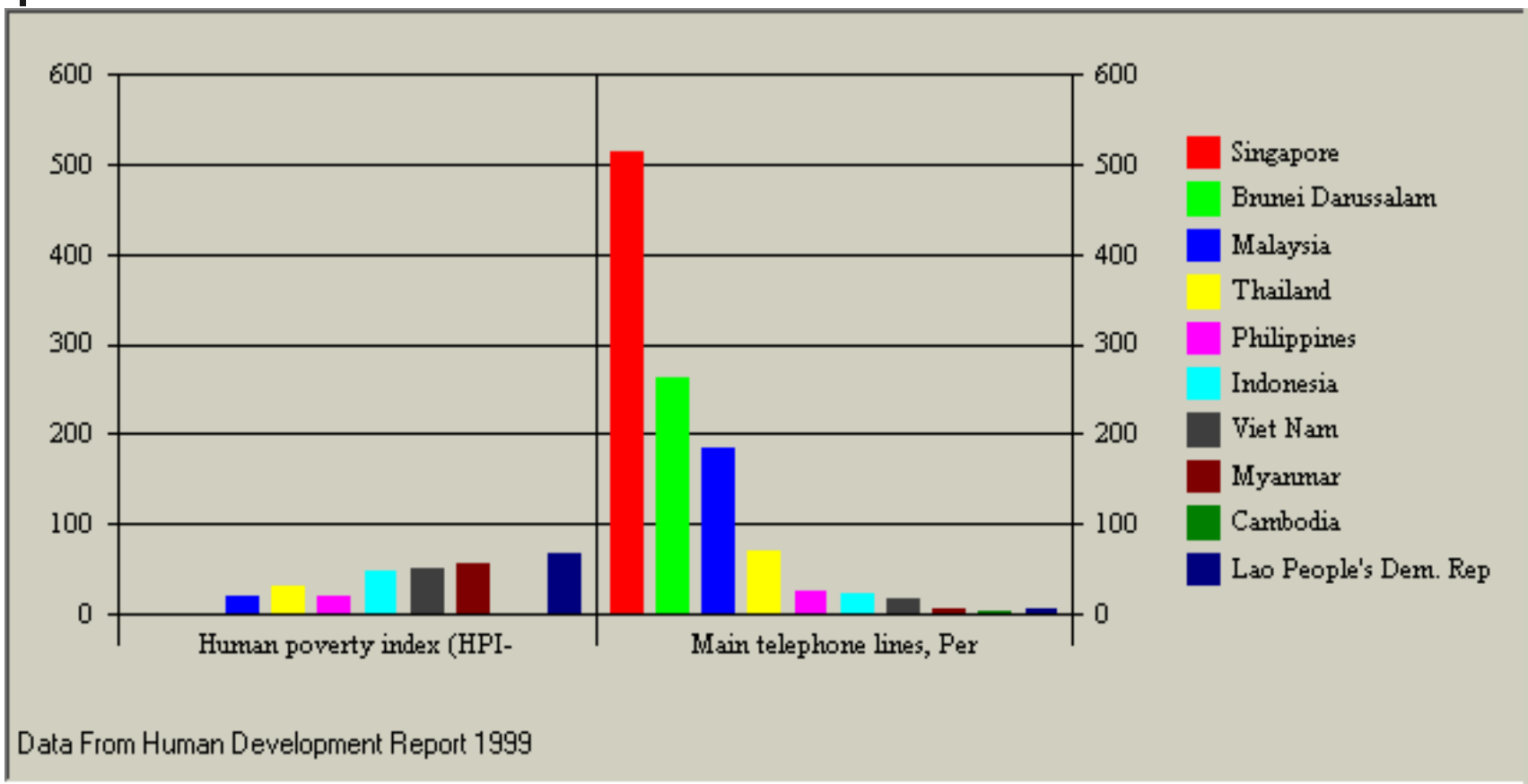
Bar Chart: Poverty & TV Ownership



Bar Chart: Poverty & PC Ownership



Bar Chart: Poverty & Telephone Density



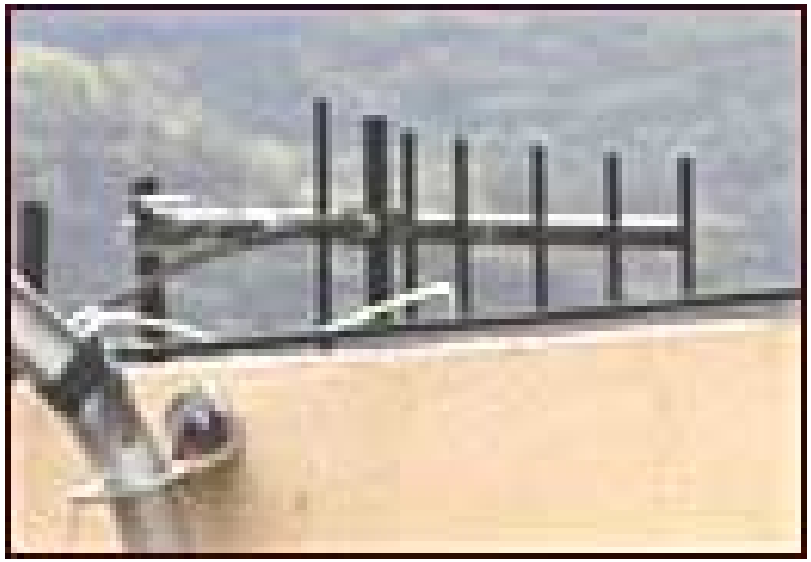
Bangladesh Virtual Villages

Technology and the developing world

CNN.com

Dominican Republic

CNN.com



Virtual Villages

Technology and the developing world

Poverty Mapping

- spatial descriptions of the distribution of poverty
- combines geographically-referenced survey and census data to generate poverty and inequality profiles at low levels of aggregation
- based on highly disaggregated data, serve benchmarking, efficient targeting, as well as monitoring and evaluation purposes

ArcView GIS Version 3.1

File Edit Table Field Window Help

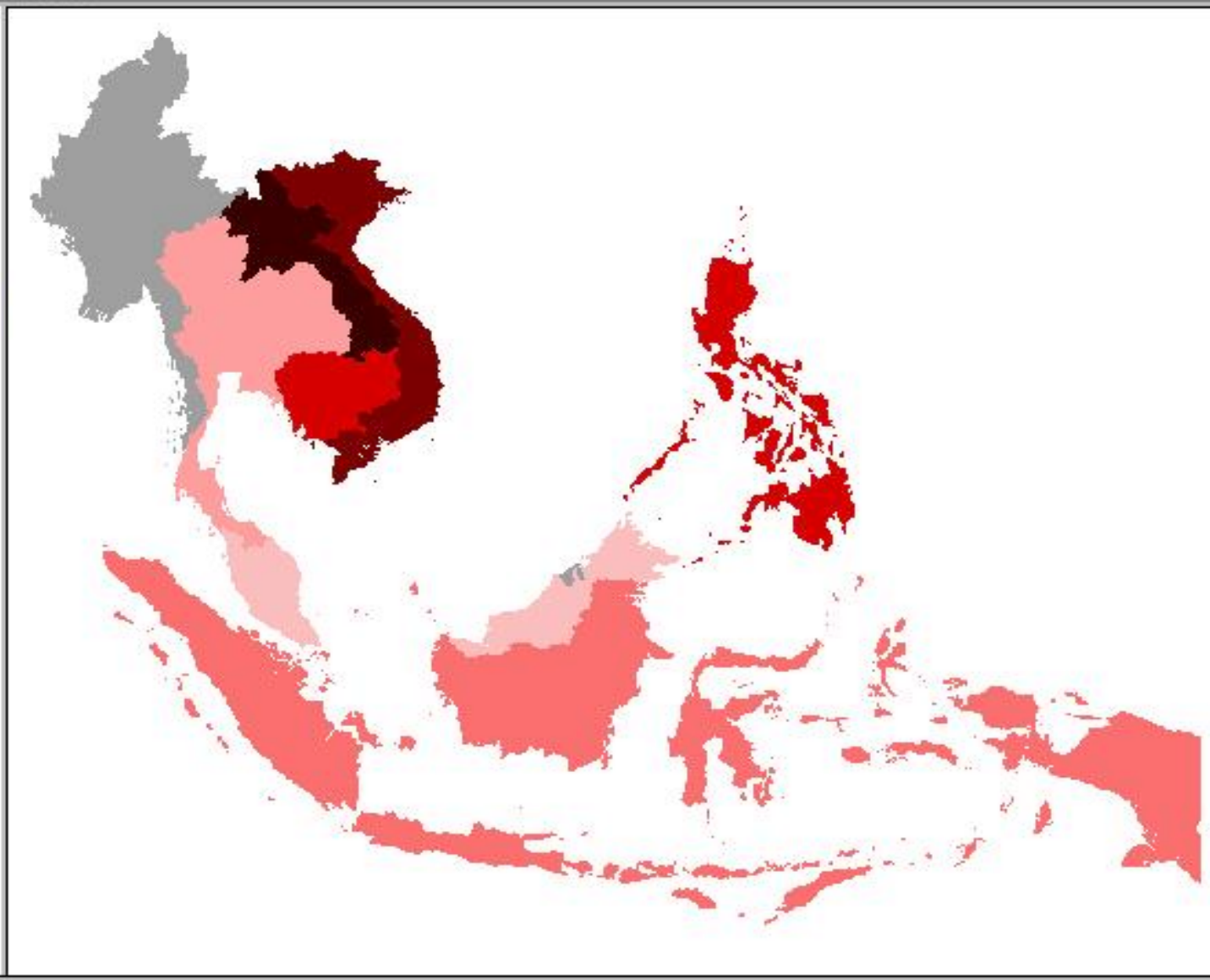
0 of 10 selected

Poverty Incidence in Southeast Asia

Poverty Invidence (%)
- 46.1 Lao PDR
- 37.0 Vietnam
- 36.8 Philippines
- 36.1 Cambodia
- 18.2 Thailand
- 12.9 Indonesia
- 8.0 Malaysia
- no data

Attributes of S...

Cntry_name	Pov_inc_S
Brunei	0.0
Cambodia	36.1
Indonesia	18.2
Laos	46.1
Malaysia	8.0
Myanmar (Burma)	
Philippines	36.8
Singapore	
Thailand	12.9
Vietnam	37.0

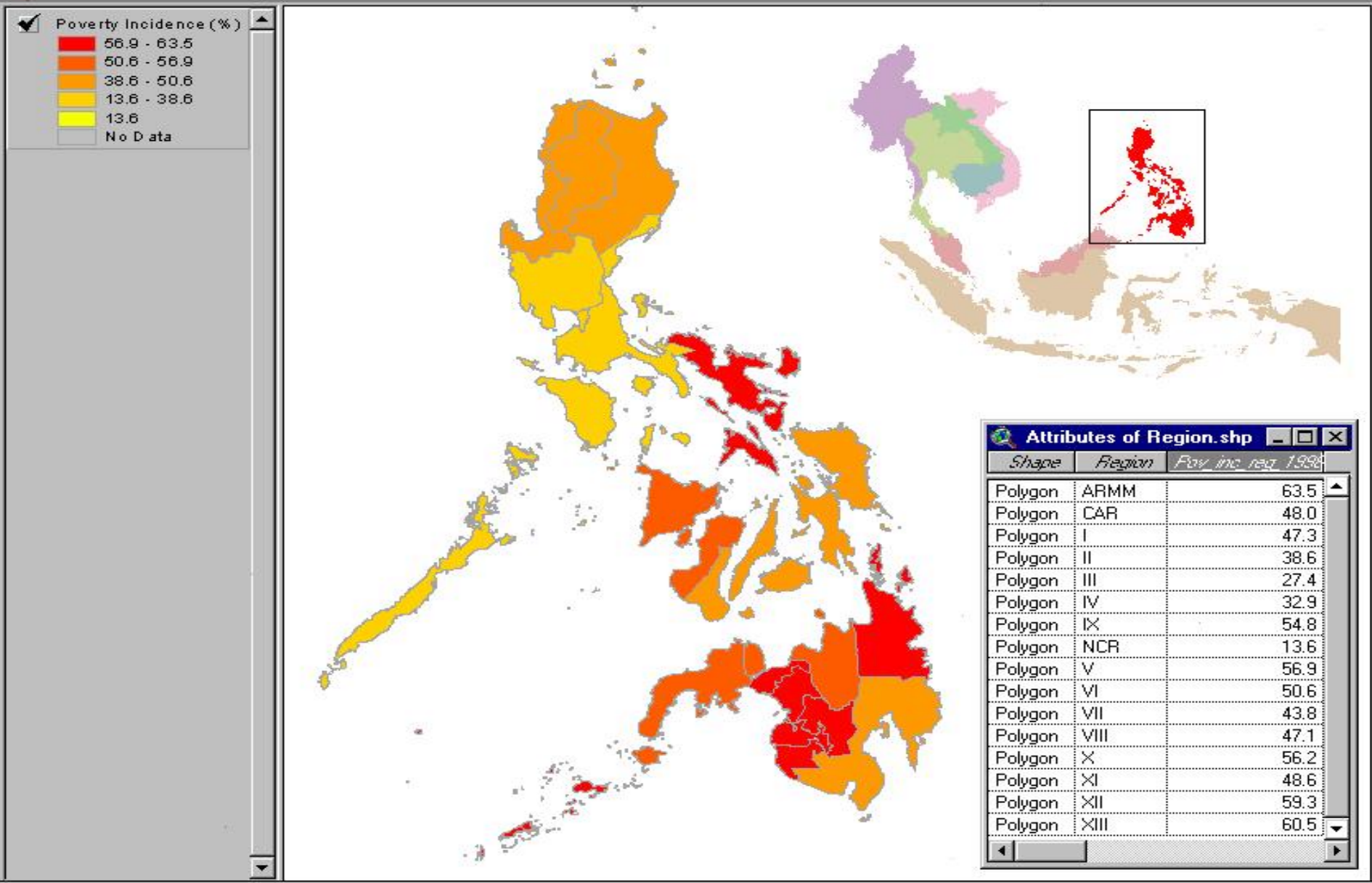


ArcView GIS 3.2

File Edit Table Field Window Help

0 of 16 selected

Poverty Incidence by Region



Attributes of Region.shp

Shape	Region	Pov_inc_rep_1998
Polygon	ARMM	63.5
Polygon	CAR	48.0
Polygon	I	47.3
Polygon	II	38.6
Polygon	III	27.4
Polygon	IV	32.9
Polygon	IX	54.8
Polygon	NCR	13.6
Polygon	V	56.9
Polygon	VI	50.6
Polygon	VII	43.8
Polygon	VIII	47.1
Polygon	X	56.2
Polygon	XI	48.6
Polygon	XII	59.3
Polygon	XIII	60.5

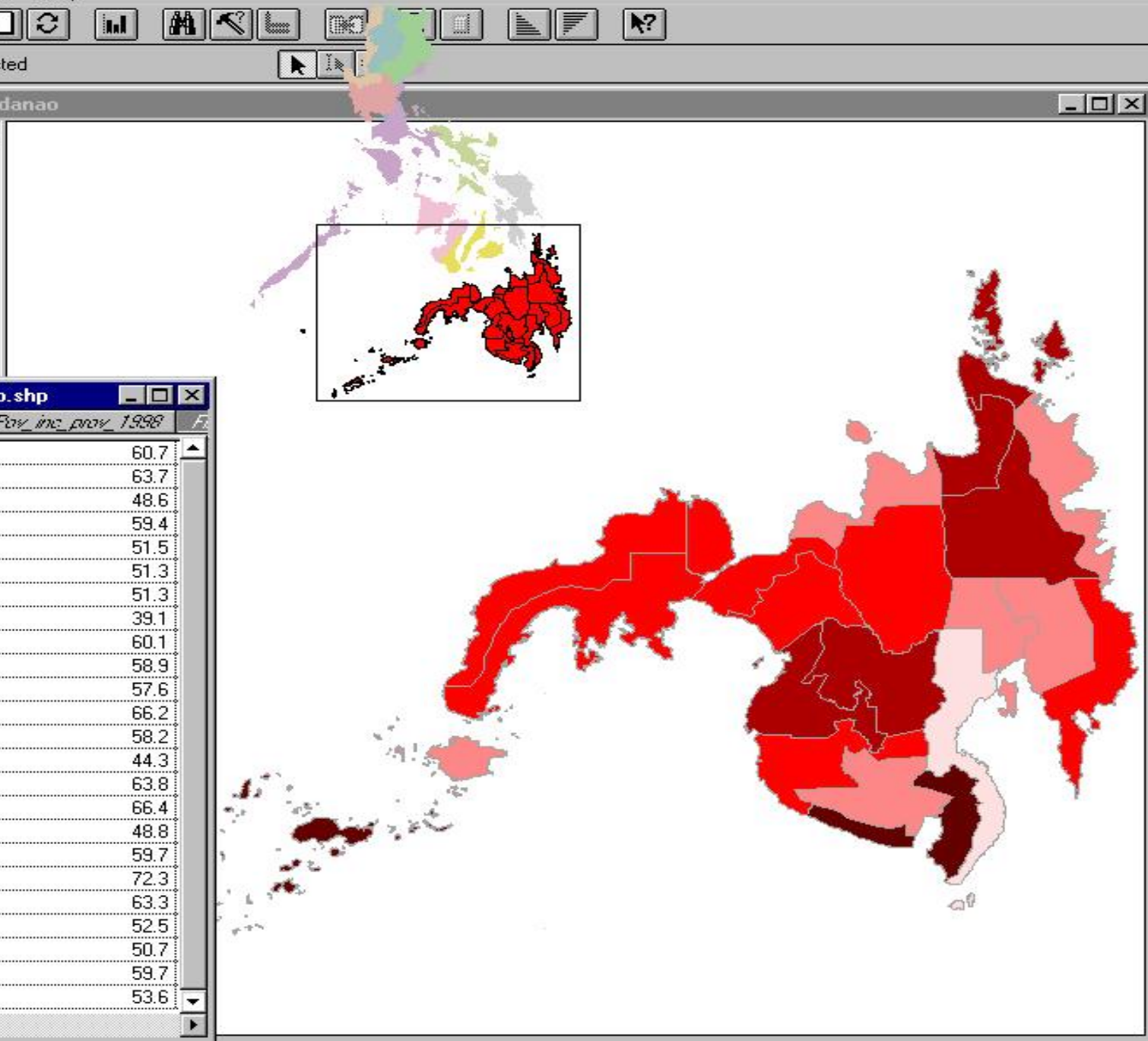
ArcView GIS 3.2

File Edit Table Field Window Help

0 of 24 selected

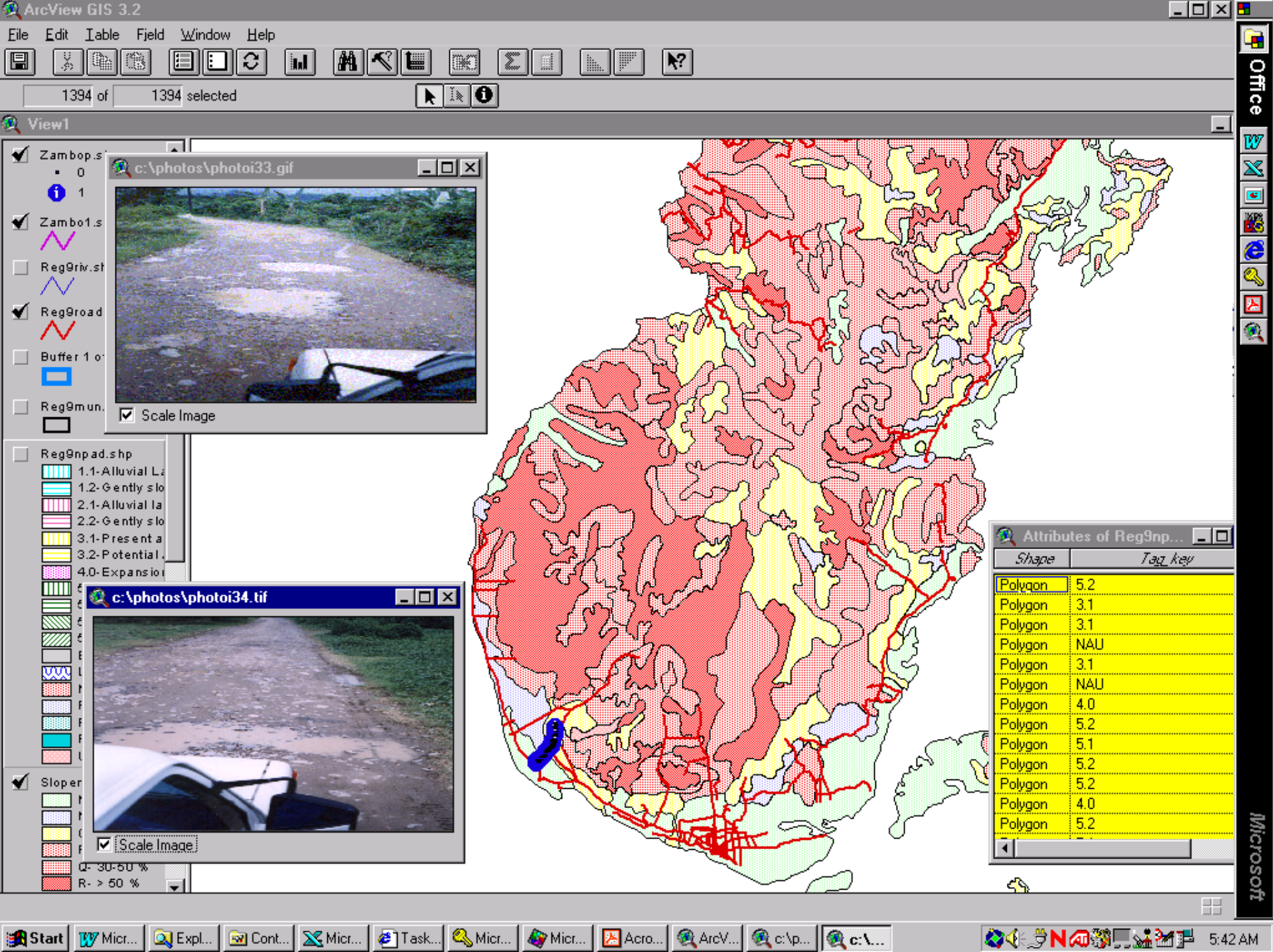
Poverty Incidence in Mindanao

Poverty Incidence (%)
66.4 - 72.3
60.7 - 66.4
53.6 - 60.7
44.3 - 53.6
39.1 - 44.3
No Data



Attributes of Mindanao.shp

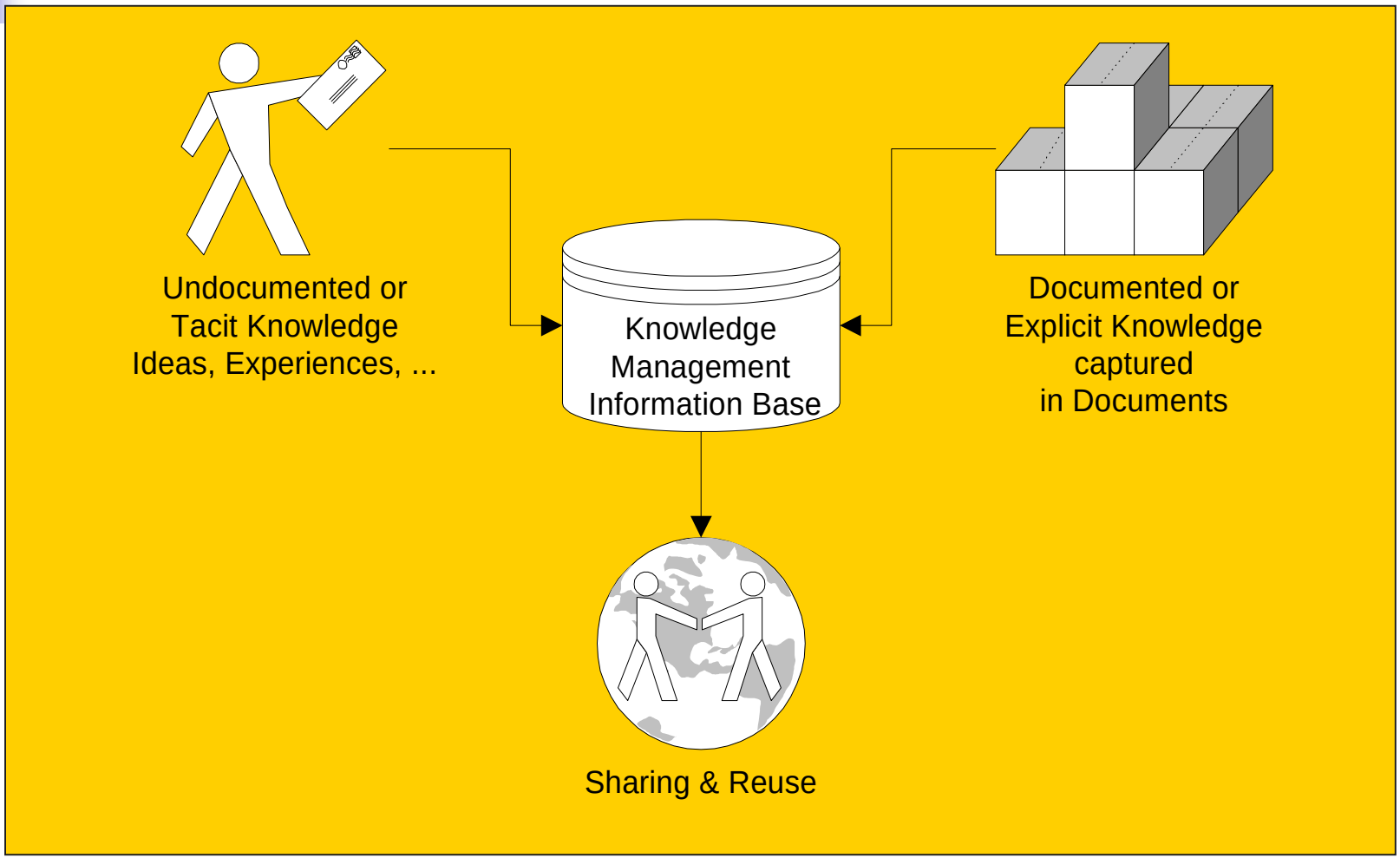
Province	Pov_inc_prov_1998
AGUSAN DEL NORTE	60.7
AGUSAN DEL SUR	63.7
BASILAN	48.6
BUKIDNON	59.4
CAMIGUIN	51.5
COMPOSTELA VALLEY	51.3
DAVAO DEL NORTE	51.3
DAVAO DEL SUR	39.1
DAVAO ORIENTAL	60.1
LANAO DEL NORTE	58.9
LANAO DEL SUR	57.6
MAGUINDANAO	66.2
MISAMIS OCCIDENTAL	58.2
MISAMIS ORIENTAL	44.3
NORTH COTABATO	63.8
SARANGANI	66.4
SOUTH COTABATO	48.8
SULTAN KUDARAT	59.7
SULU	72.3
SURIGAO DEL NORTE	63.3
SURIGAO DEL SUR	52.5
TAWI-TAWI	50.7
ZAMBOANGA DEL NORT	59.7
ZAMBOANGA DEL SUR	53.6


ArcView GIS 3.2
File Edit Table Field Window Help
1394 of 1394 selected
View1
Zambop.s
0
1
Zambo1.s
Reg9riv.sh
Reg9road
Buffer 1 o
Reg9mun.
c:\photos\photoi33.gif
Scale Image
Reg9npad.shp
1.1-Alluvial La
1.2-Gently slo
2.1-Alluvial la
2.2-Gently slo
3.1-Present a
3.2-Potential
4.0-Expansio
c:\photos\photoi34.tif
Scale Image
Sloper
Q- 30-50 %
R- > 50 %
Attributes of Reg9np...
Shape
Tag_key
Polygon 5.2
Polygon 3.1
Polygon 3.1
Polygon NAU
Polygon 3.1
Polygon NAU
Polygon 4.0
Polygon 5.2
Polygon 5.1
Polygon 5.2
Polygon 5.2
Polygon 4.0
Polygon 5.2
Office
Microsoft
Start
5:42 AM

Knowledge Management

- *Definition:* A newly emerging discipline that treats intellectual capital as a manageable asset *(Microsoft, 1999)*
- *Examples: UNDP Mango Information Network (1997); ASEAN IPM Knowledge Network (1998);*

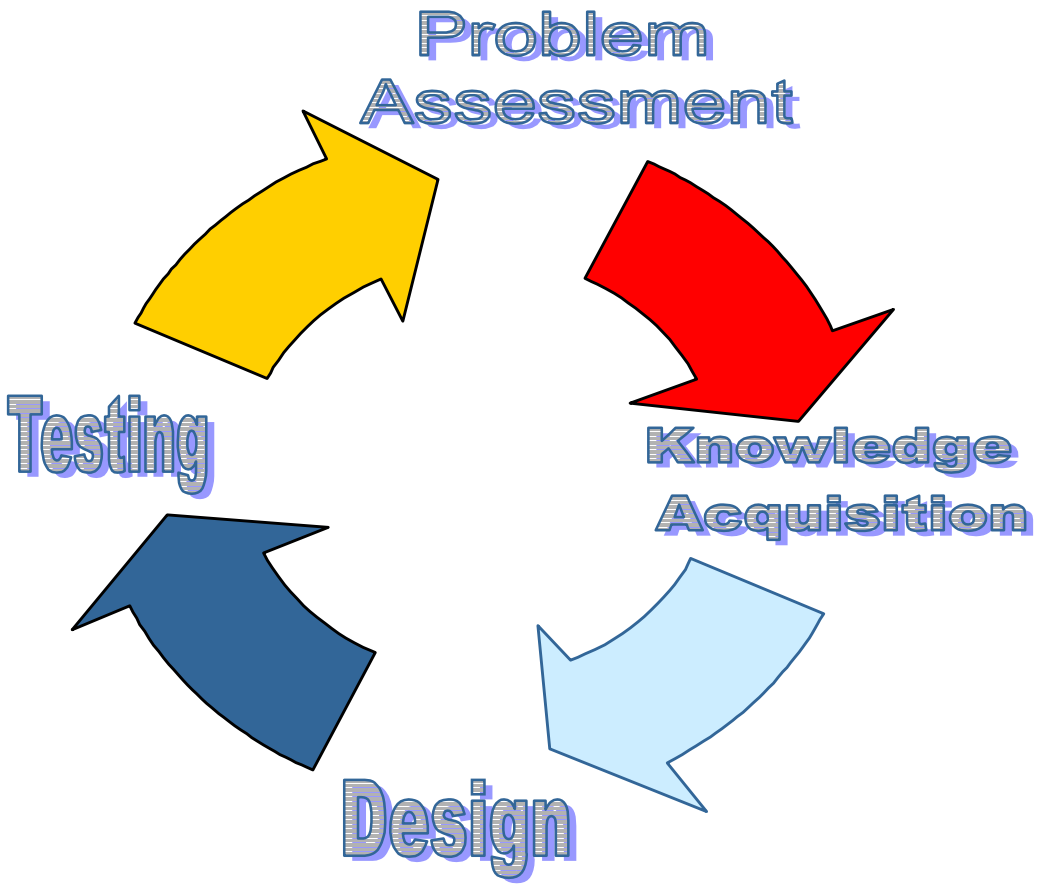
Goal of Knowledge Management



SEARCA's Knowledge Management Program

- Essentially an R&D program that explores ICT's sustainable development applications
- Based on two propositions:
  - *Poverty eradication is the highest social goal for ICT*
  - *KM is the best social application of ICT*
- Covers entire spectrum of knowledge sharing & reuse: knowledge engineering; multimedia content; delivery systems.

The Knowledge Engineering Cycle



Multimedia content

- Cost-efficient multimedia production techniques and procedures
- Bandwidth-efficient digital platforms
- Cost-and bandwidth-effective content presentation formats
- Packaging of best practice and lessons learned

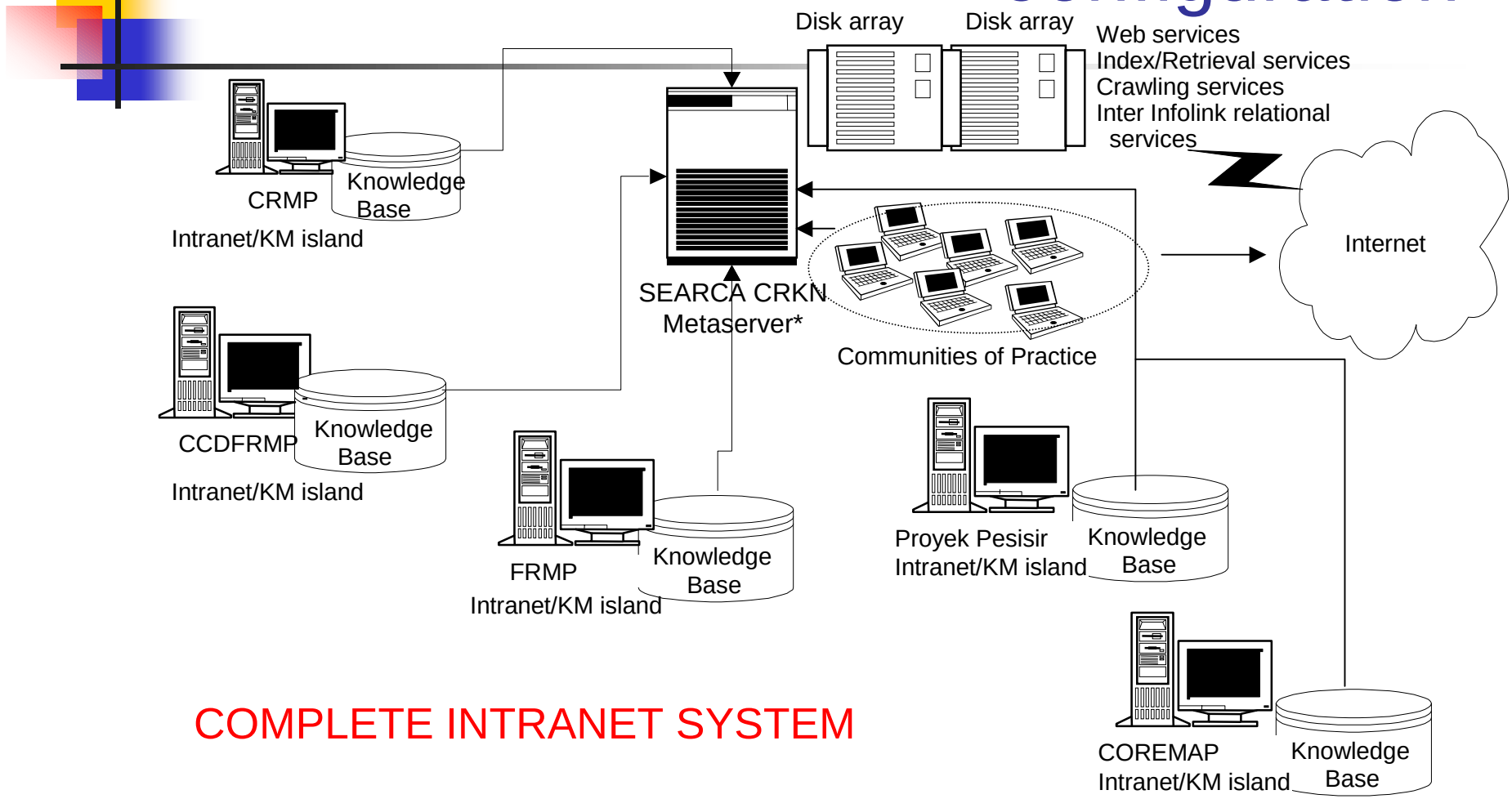
Delivery systems

- Regional integration of agricultural research systems
- Interconnectivity
- Standards: end to end platforms, protocols, operating systems, templates
- Low-end technology for rural and peri-urban communities

Southeast Asian CRM Knowledge Network

- Sulu-Celebes as the Vavilov Center for marine biodiversity
- Several on-gojng knowledge-generating initiatives
- Coastal & marine ecosystem as the most fragile among ecosystems
- The need to revise/update curricula to accommodate new models
- The need for sound CRM & fisheries policy
- The imperative for knowledge management

CRM Knowledge Network Configuration

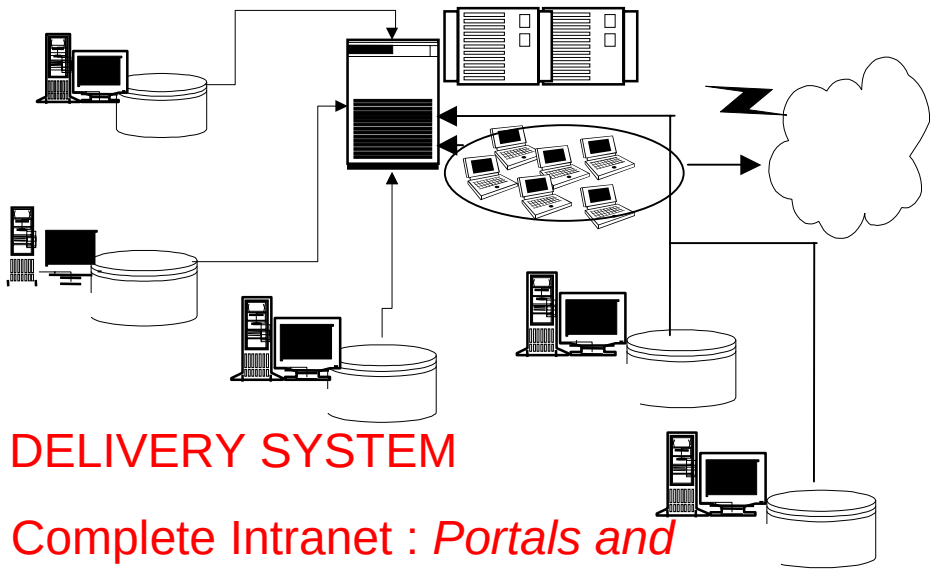


COMPLETE INTRANET SYSTEM

* may be mirrored in ICLARM (Malaysia)

CRM Knowledge Network Content

Non-Material Interventions and Innovations: *Policy, Community Development, IEC, Training and Capability Building, Institutional Strengthening, Microenterprises and Microfinance*



DELIVERY SYSTEM

Complete Intranet : *Portals and Search Engines, On-Line Publications, Bulletin-Boards, Communities of Practice, E-mail*

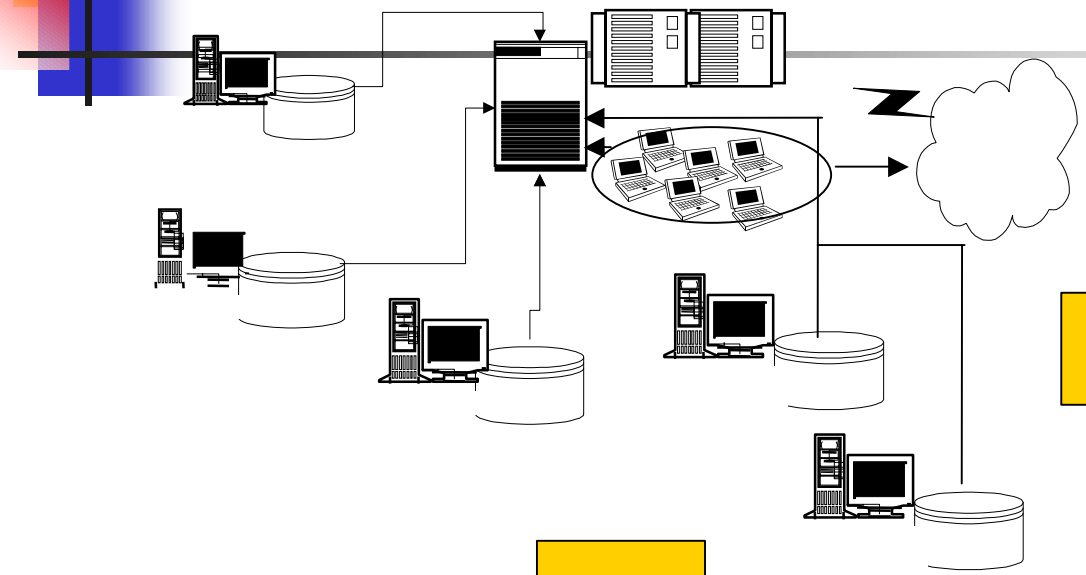
Models

Processes

FORMATS

Georeferenced Databases:*Directories, Bibliographic, Factual.*
Electronic Documents: *Text and Multimedia,* E-Conferences, CD-ROM

CRM Knowledge Network's Strategic Inputs



The Policy Process: *Agriculture, Fisheries and Resource Management Policy in Southeast Asia*

SYNERGY

Southeast Asian Higher Education: *Environmental Management, Fisheires and Marine Science Curricula, Textbooks and Instructional Materials*