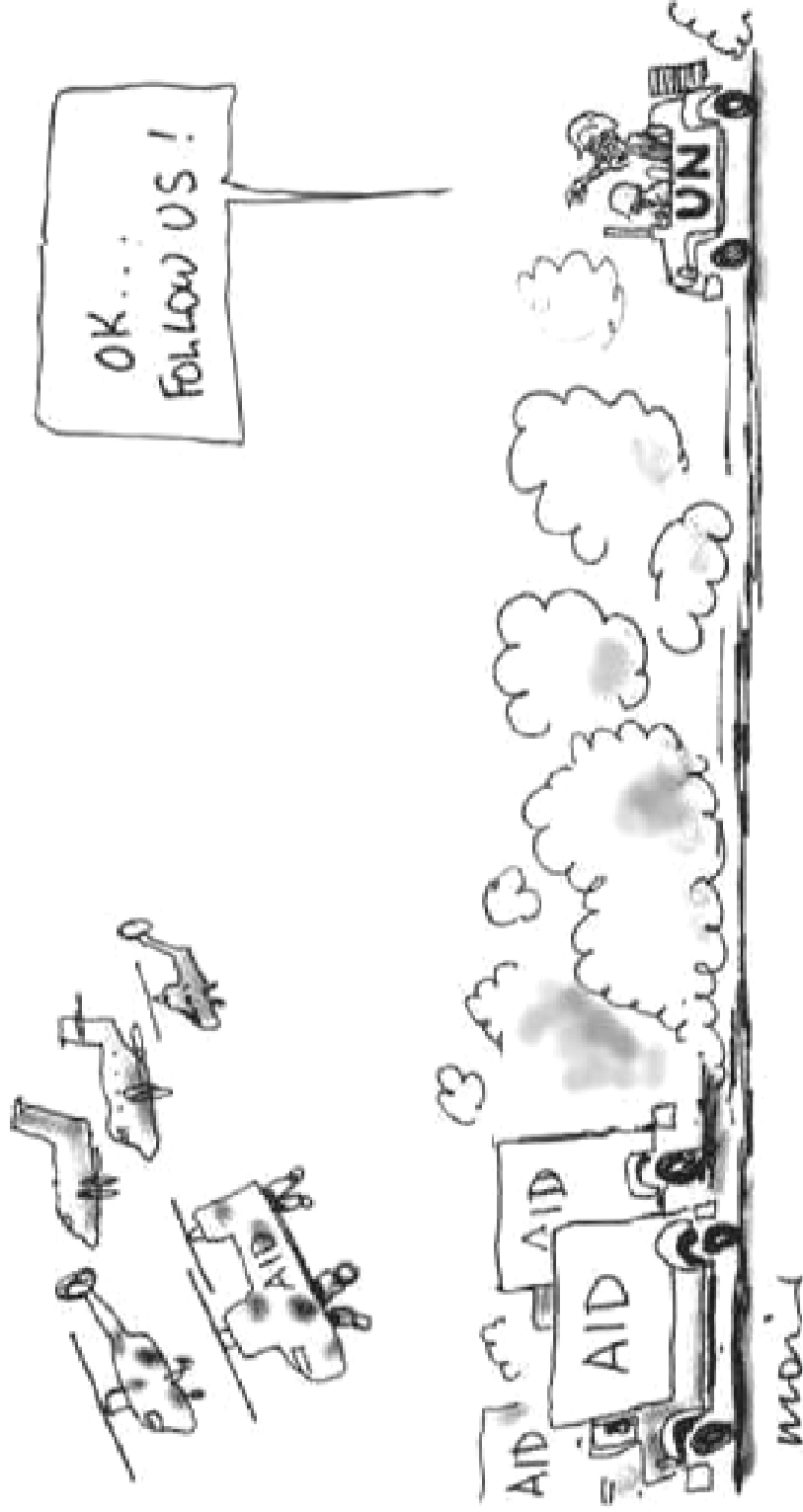




Mine Action, Security and Logistics

A problem of access





The Geneva International Centre for Humanitarian Demining (GICHD)

- > Independent, impartial and neutral expert organisation founded in April 1998, following the signing of the Ottawa Treaty (APMBC)
- > Deals with all aspects of landmines, cluster munitions and explosive remnants of war



GICHD Strategy 2012-2014

Two strategic objectives:

> Global clarity on explosive hazards

The GICHD shall accelerate progress toward global clarity by supporting partner countries in adopting effective survey and reporting methods, implementing sound information management practices, and documenting the impact of both explosives contamination and mine action.

> High-performing national authorities and national ownership

The GICHD shall enhance the capacities of partner countries in designing and implementing programme-based resource allocation systems to improve performance, based on decision-support and quality management solutions at the strategic and operations levels.



Scope of GICHD Activity



Anti-Personnel Mines

GICHD | CIDHG



Blast



Fragmentation



Anti-Vehicle Mines

GICHD | CIDHG



Mainly pressure-operated



Ambulance near Kabul





Cluster Munitions



Explosive Remnants of War (ERW)

GICHD | CIDHG



UXO

Unexploded Ordnance



AXO

Abandoned Expl^osive
Ordnance



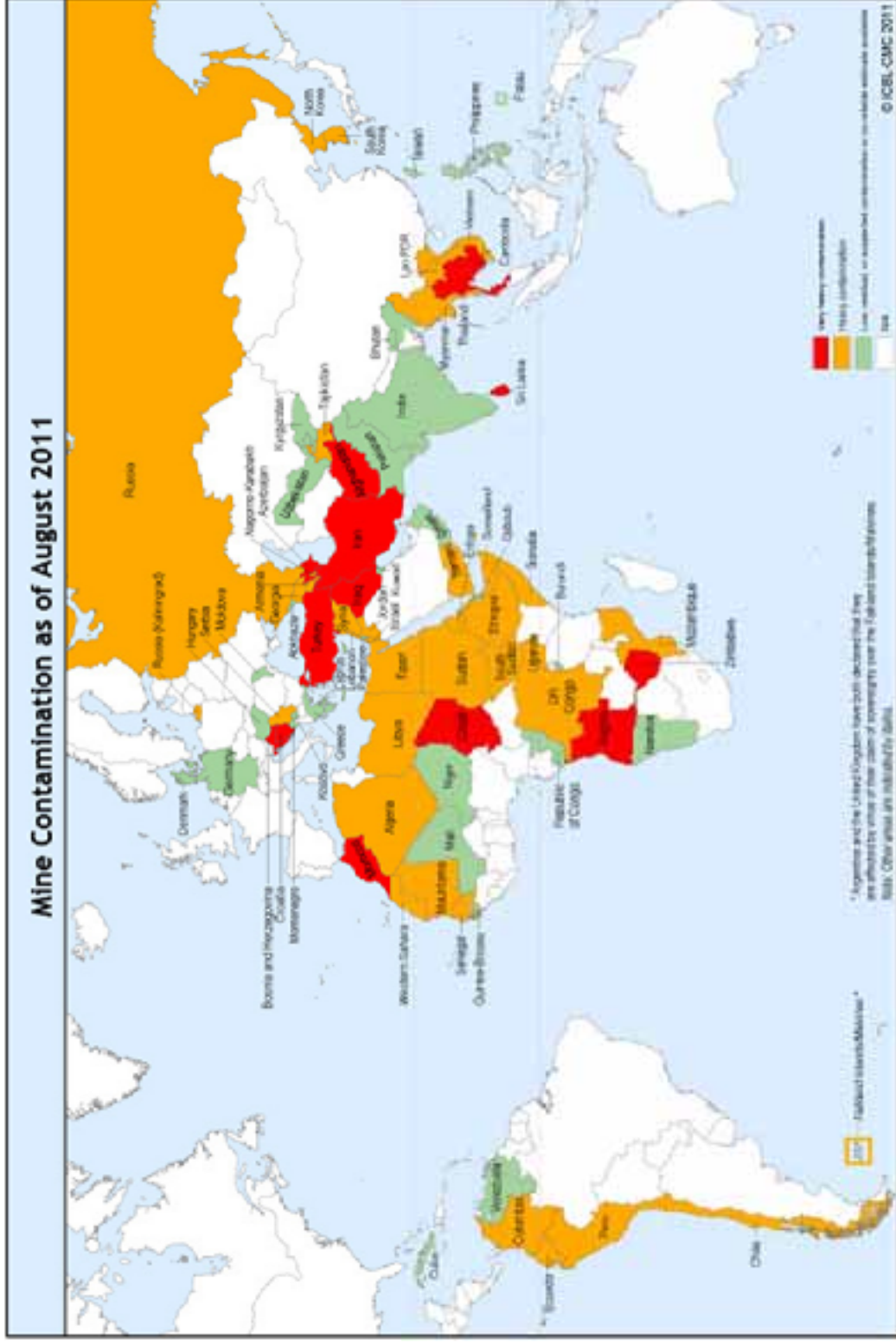


Munitions Storage





The Global Mine Problem

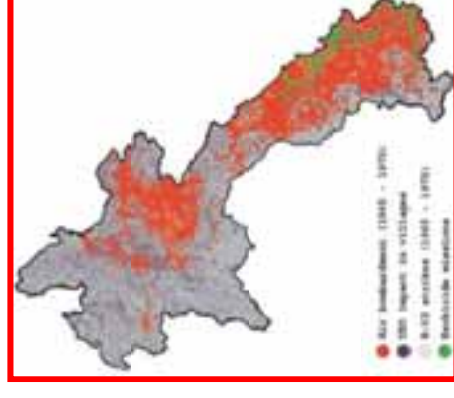


Source: Landmine Monitor Report 2011

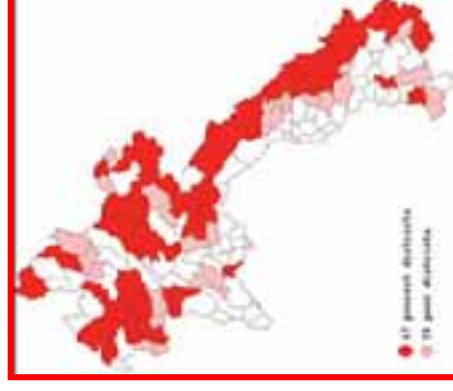


The consequences of mines/cluster munition remnant contamination

- > Injures and kills civilians
- > Prevents efficient distribution of humanitarian assistance
- > Restricts access to social & economic infrastructure
- > Impedes the development of a country

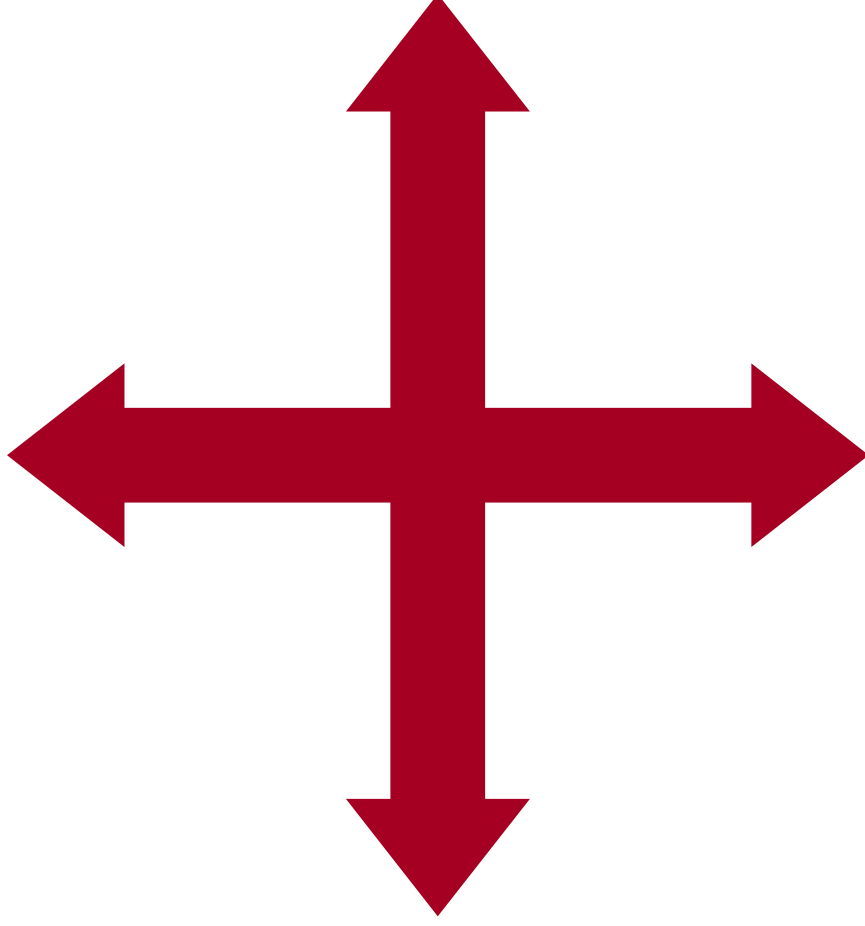


Lao PDR





International/National stakeholders



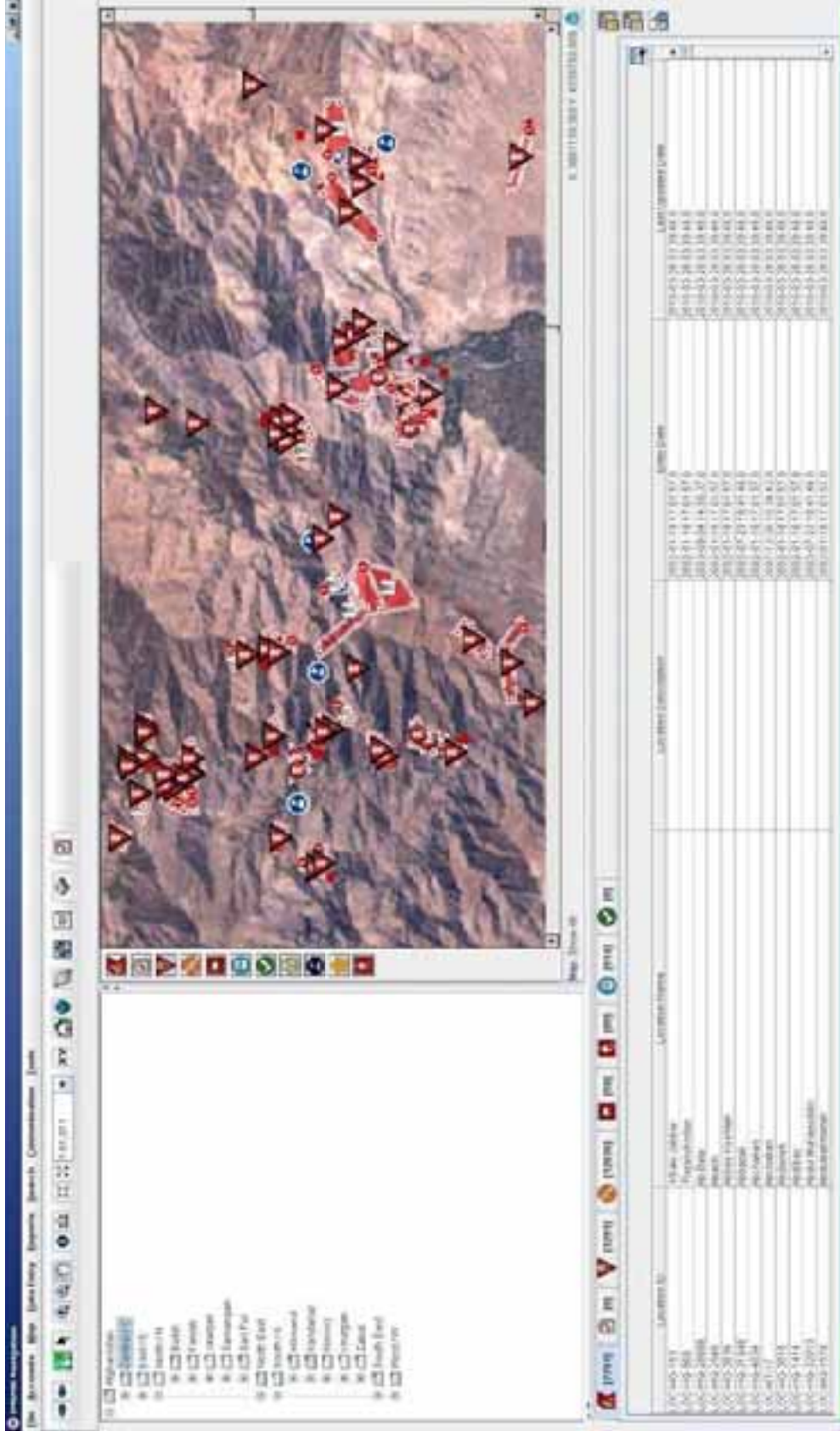
Emergency response
community

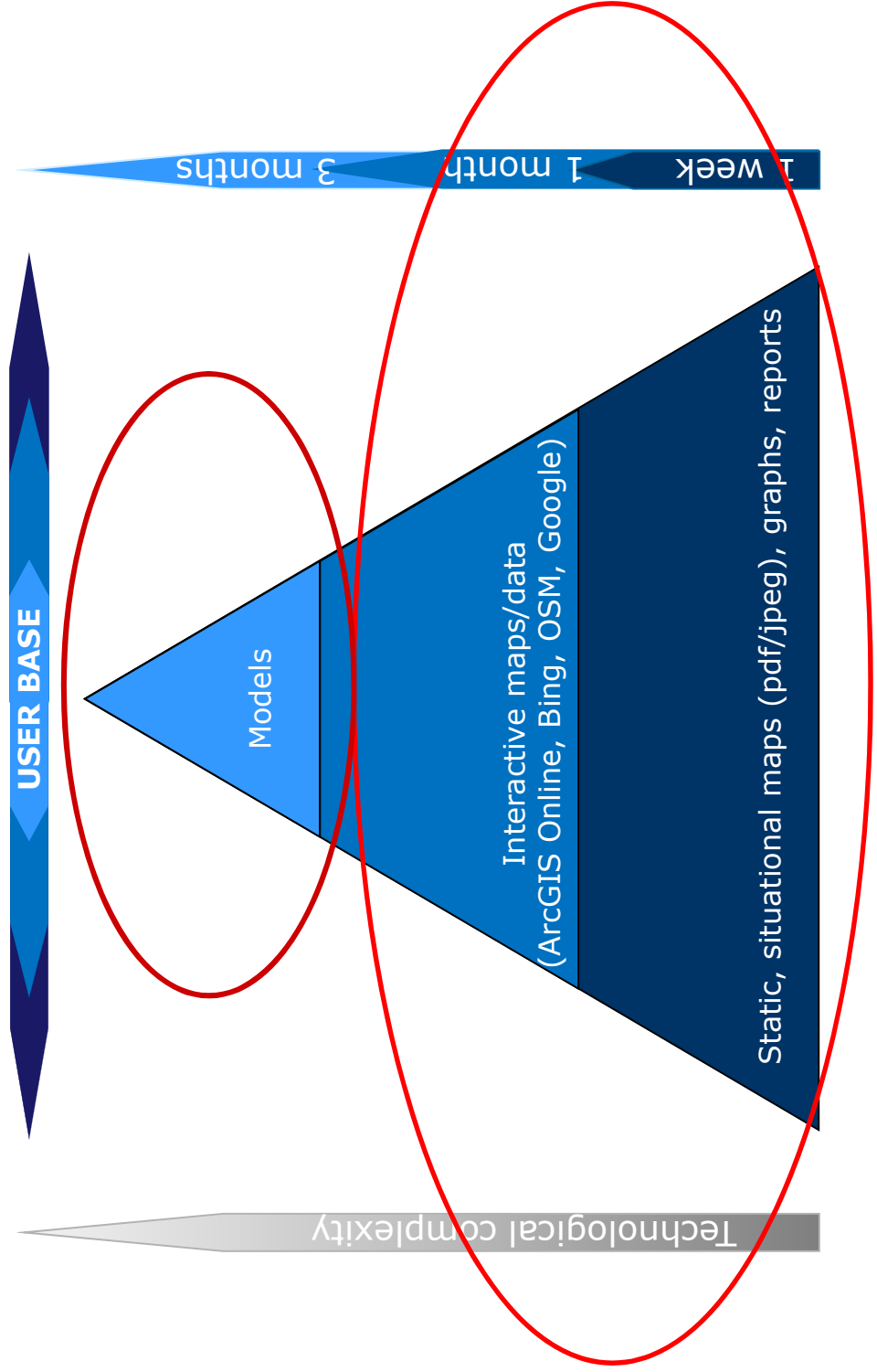
Development
community

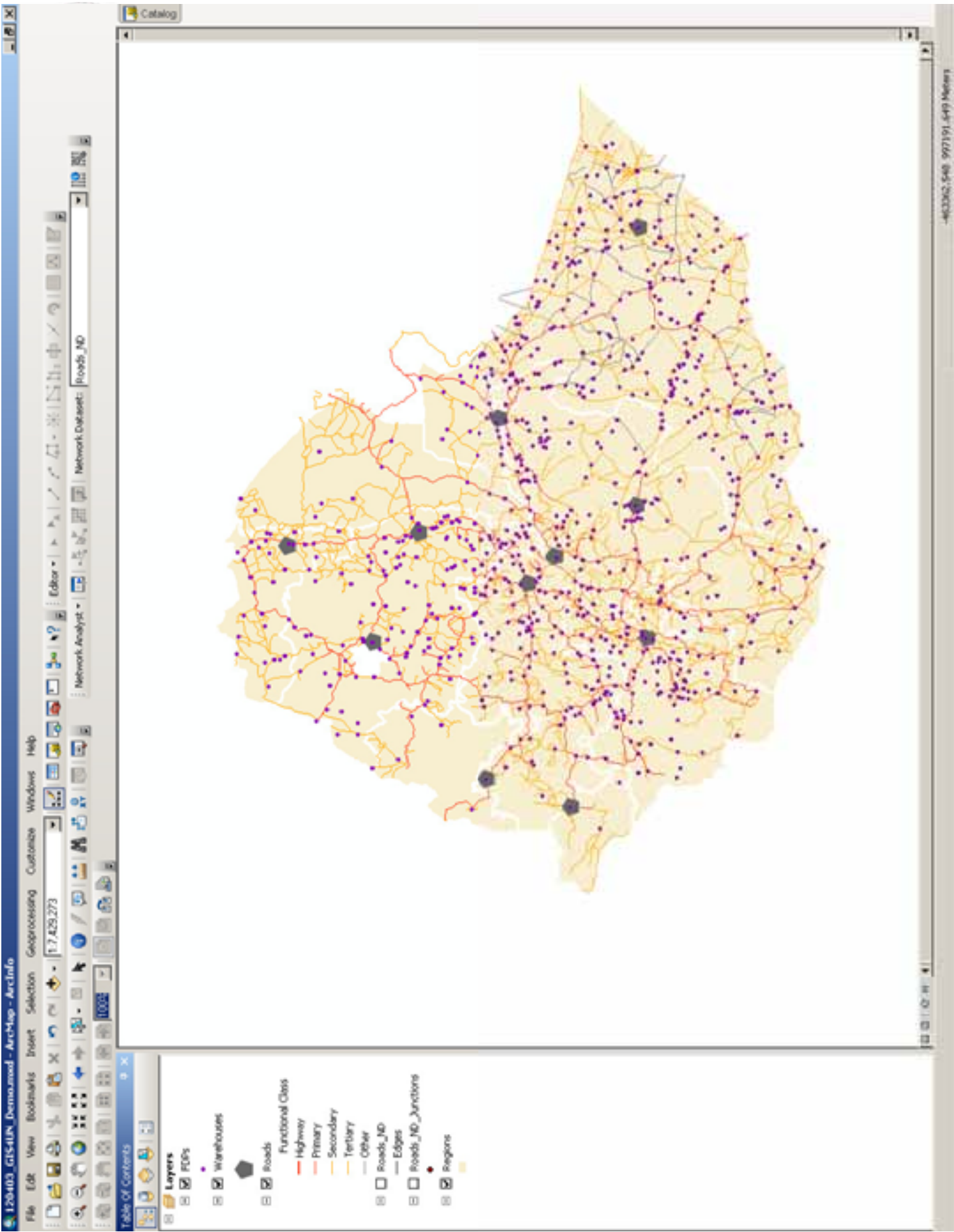
Field operators/beneficiaries



IMSMA Is used in over 60 countries

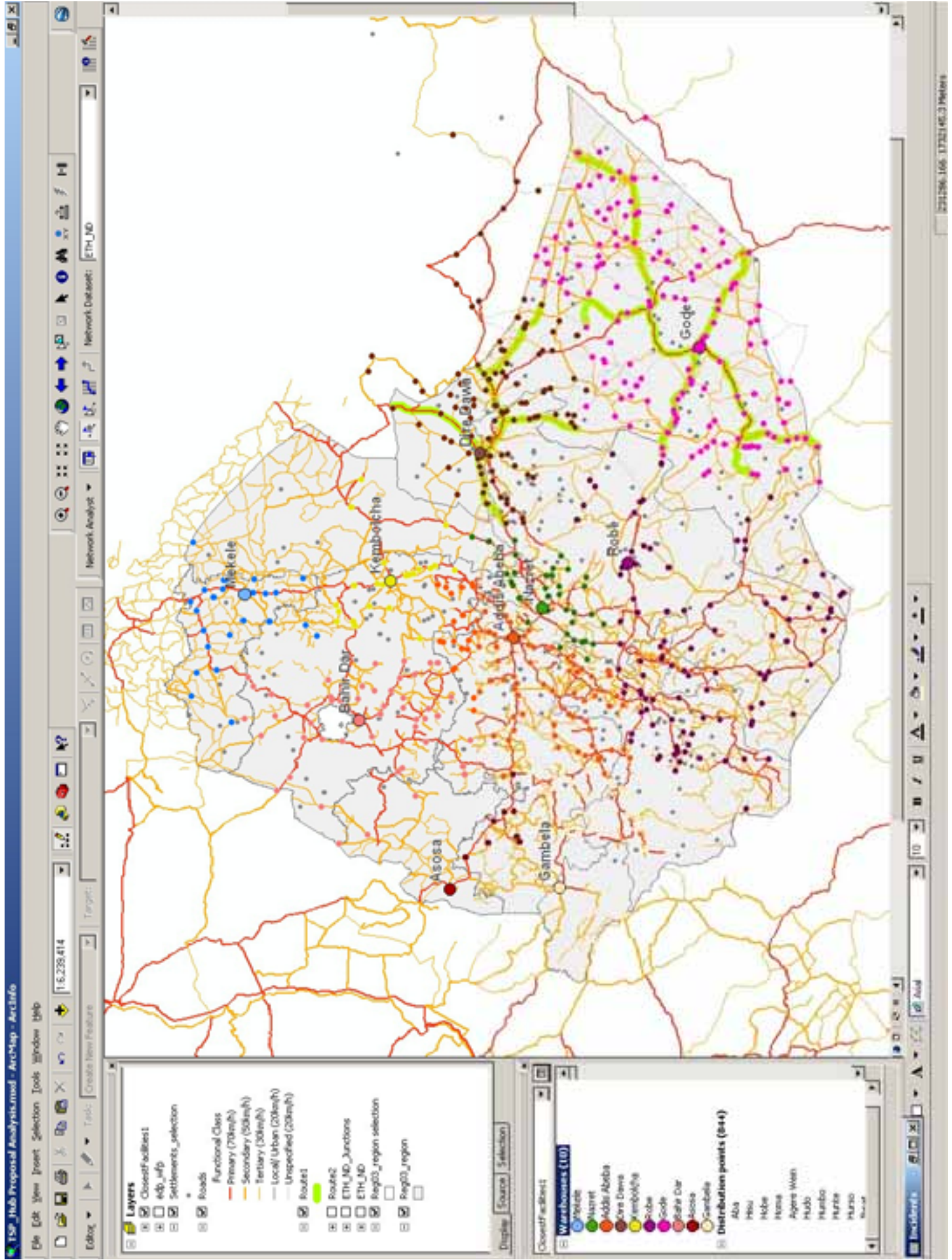






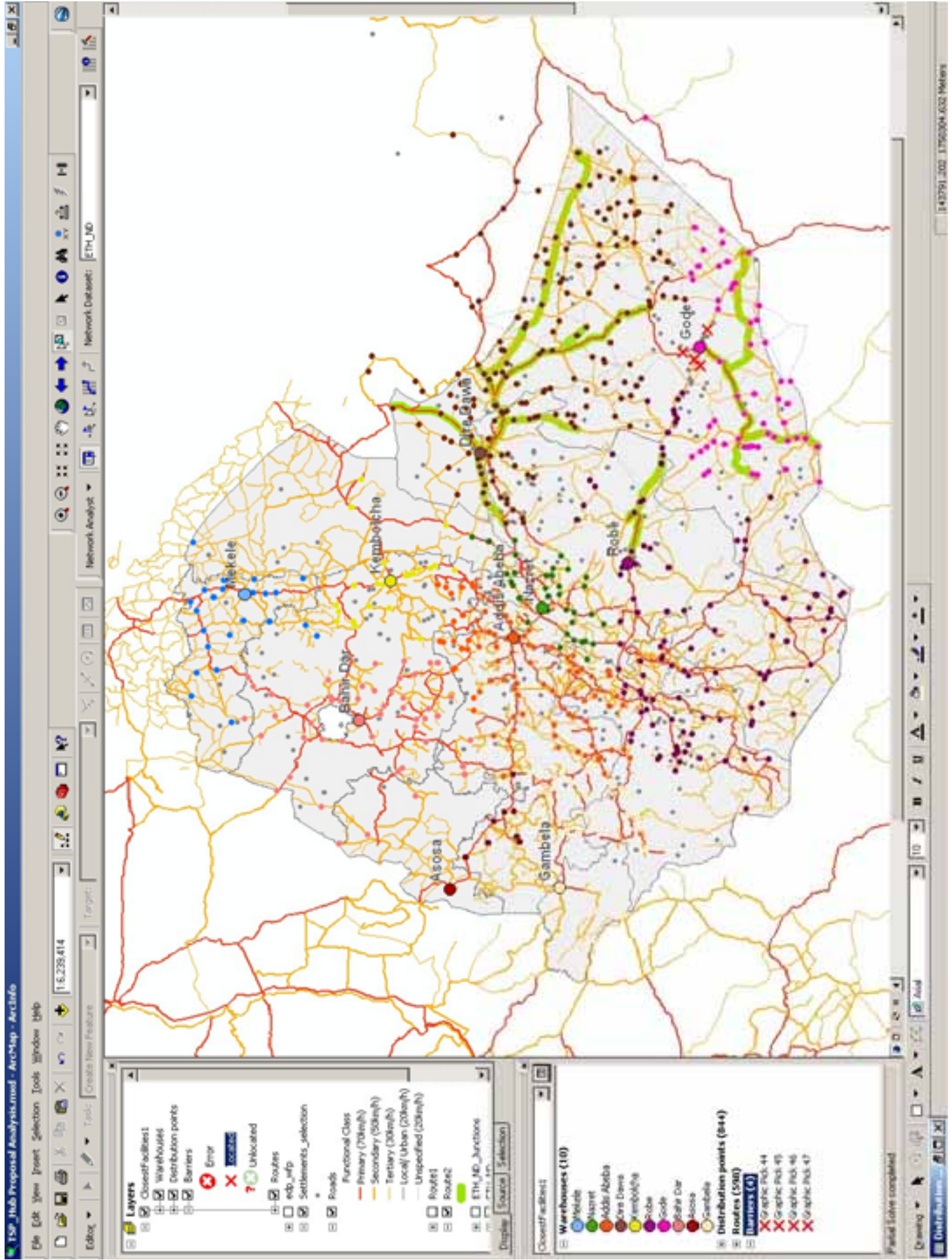


> Which Final Delivery Points (FDPs) should be allocated to which warehouse?





> **What is the impact on allocation of road blockages due to Anti-Vehicle Mines?**



Layers

- ClosestFacilities
- W/Whouses
- Distribution points
- Barriers
- Error
- Locations
- Unlocated
- Routes
- end_wfp
- Settlements_selection
- Roads
- Functional Class
 - Primary (70km/h)
 - Secondary (50km/h)
 - Tertiary (30km/h)
 - Local/Urban (20km/h)
 - Unspecified (20km/h)
- Road#1
- Road#2
- ETH_ID_Junctions

Display | Source | Selection

ClosestFacilities (10)

- Wolaita
- Nazret
- Addis Ababa
- Dire Dawa
- Kembabcha
- Robbi
- Gode
- Bahir Dar
- Asosa
- Gambela

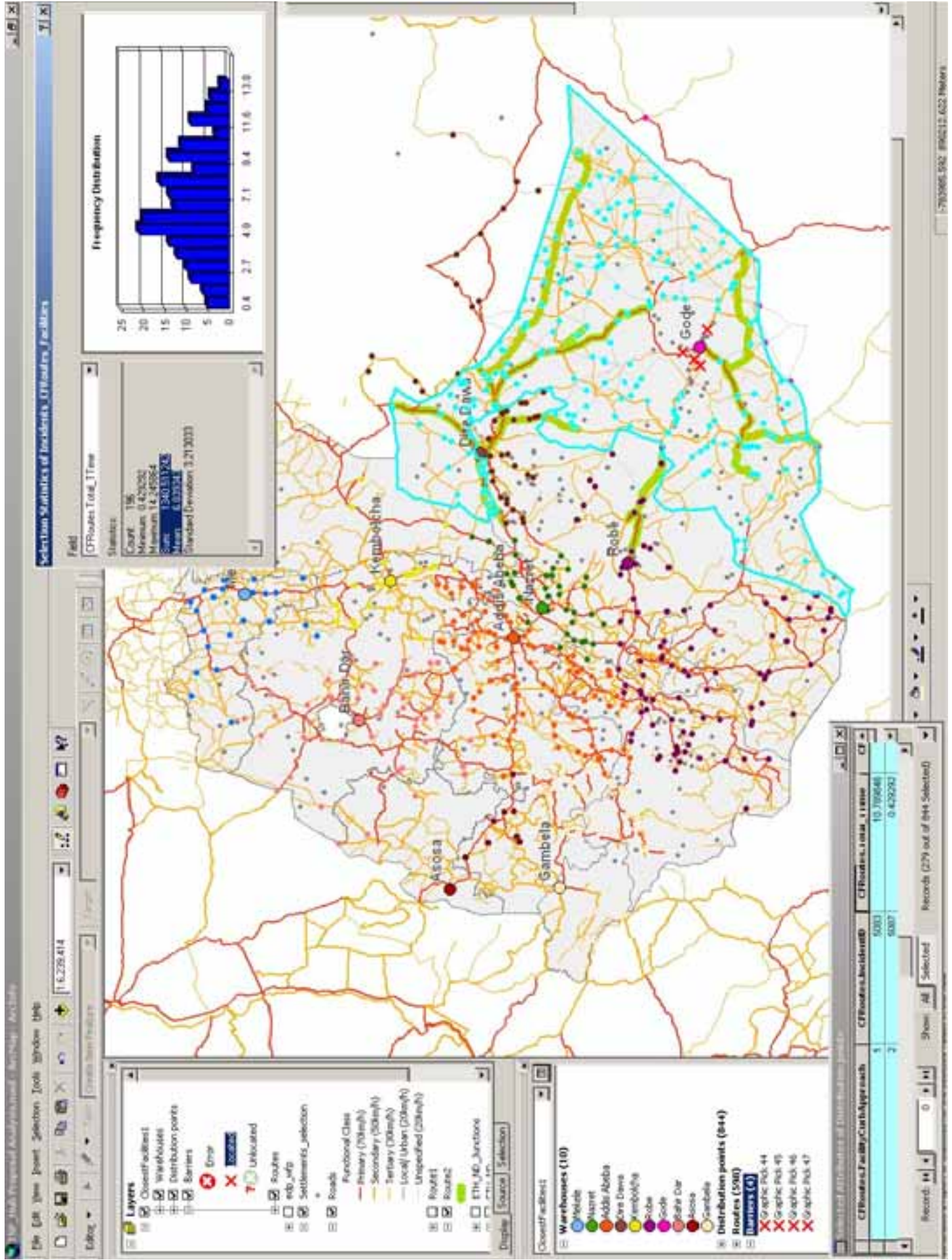
Distribution points (844)

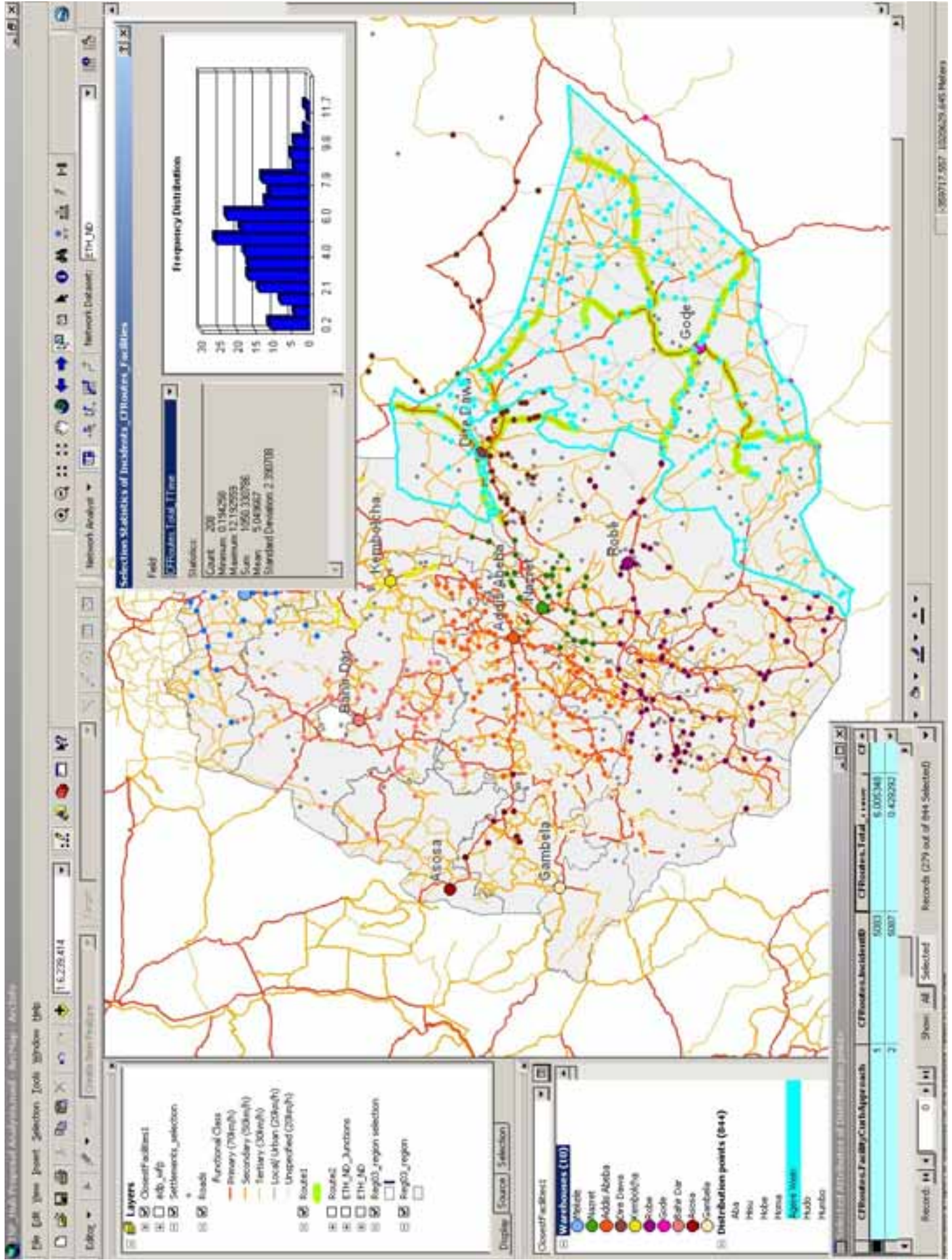
- Routes (500)
- Barriers (4)
- Graphic Pick 44
- Graphic Pick 45
- Graphic Pick 46
- Graphic Pick 47

Partial Solve completed



> What is the quantitative benefit of clearing these mines?



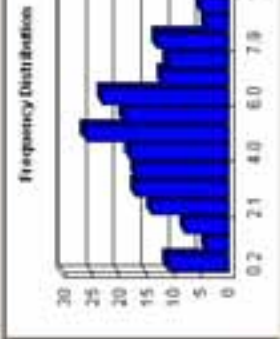


Selection Statistics of Incidents_ofRoads_Facilities

Field: **CFRoads.Total_Time**

Statistics:

Count	208
Minimum	0.114258
Maximum	12.152853
Sum	1560.130786
Mean	7.49967
Standard Deviation	2.390708



- Layers**
- IncidentFacilities
 - info_sfp
 - Settlements_selection
 - Roads
 - Functional Class
 - Primary (70km/h)
 - Secondary (50km/h)
 - Tertiary (30km/h)
 - Local/Urban (20km/h)
 - Unspecified (20km/h)
 - Route1
 - Route2
 - ETH_MO_Junctions
 - ETH_MO
 - Reg01_region selection
 - Reg02_region
 - Reg03_region

- Warstehouses (10)**
- Wolaita
 - Harari
 - Addis Ababa
 - Oromia
 - Amhara
 - Tigre
 - Gode
 - Sofa Dir
 - Asosa
 - Gambela
- Distribution points (844)**
- Ala
 - Hisu
 - Hole
 - Hom
 - Hom
 - Hom
 - Hom
 - Hom
 - Hom
 - Hom

CFRoads.FacilityClassAppr each	CFRoads.AccidentID	CFRoads.Total_Time	CF
1	5000	6.005348	
2	5007	0.429292	

Record: 11 | 0 | 11 | Show: All Selected | Records (279 out of 844 Selected)



- We have the tools
- We have the people
- But how often do we really have the data to go beyond just mapping?



- > **Provide examples of when and where GIS has been used for more than just mapping in operational settings**
- > **Discuss what factors made the difference**