



Fourth International Workshop

GSSD Strategic Partnerships on Sustainability

Knowledge Networking & Technology Collaboration

MIT, The Tang Center, January 18-19, 2000



Knowledge for Sustainability

If Knowledge is Power

Then we Must Use the Power of Knowledge

Toward Sustainability

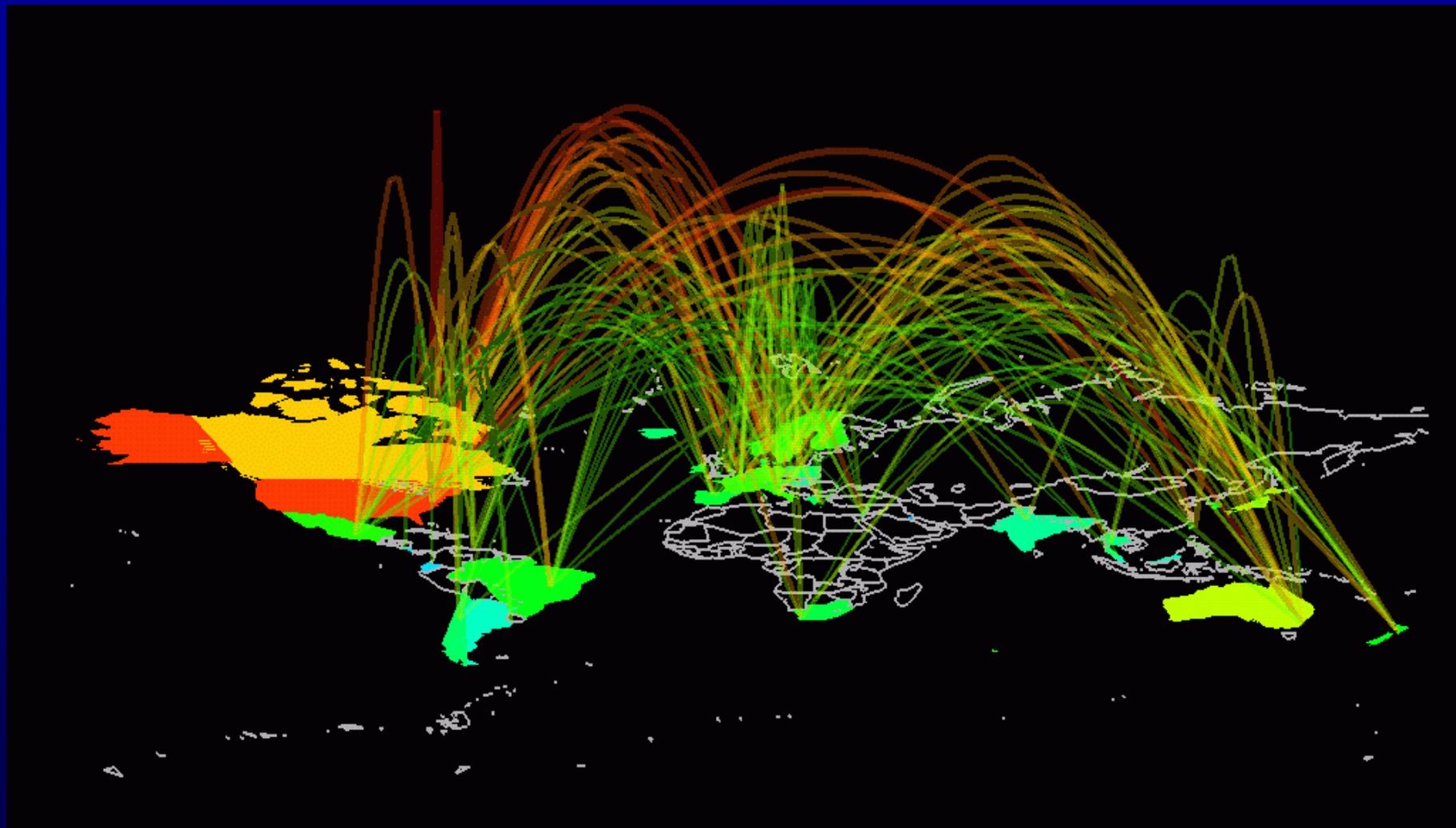


Converging Trends

- **GLOBALIZATION**
- **WORLD-WIDE CONNECTIVITY**
- **KNOWLEDGE-NETWORKING**

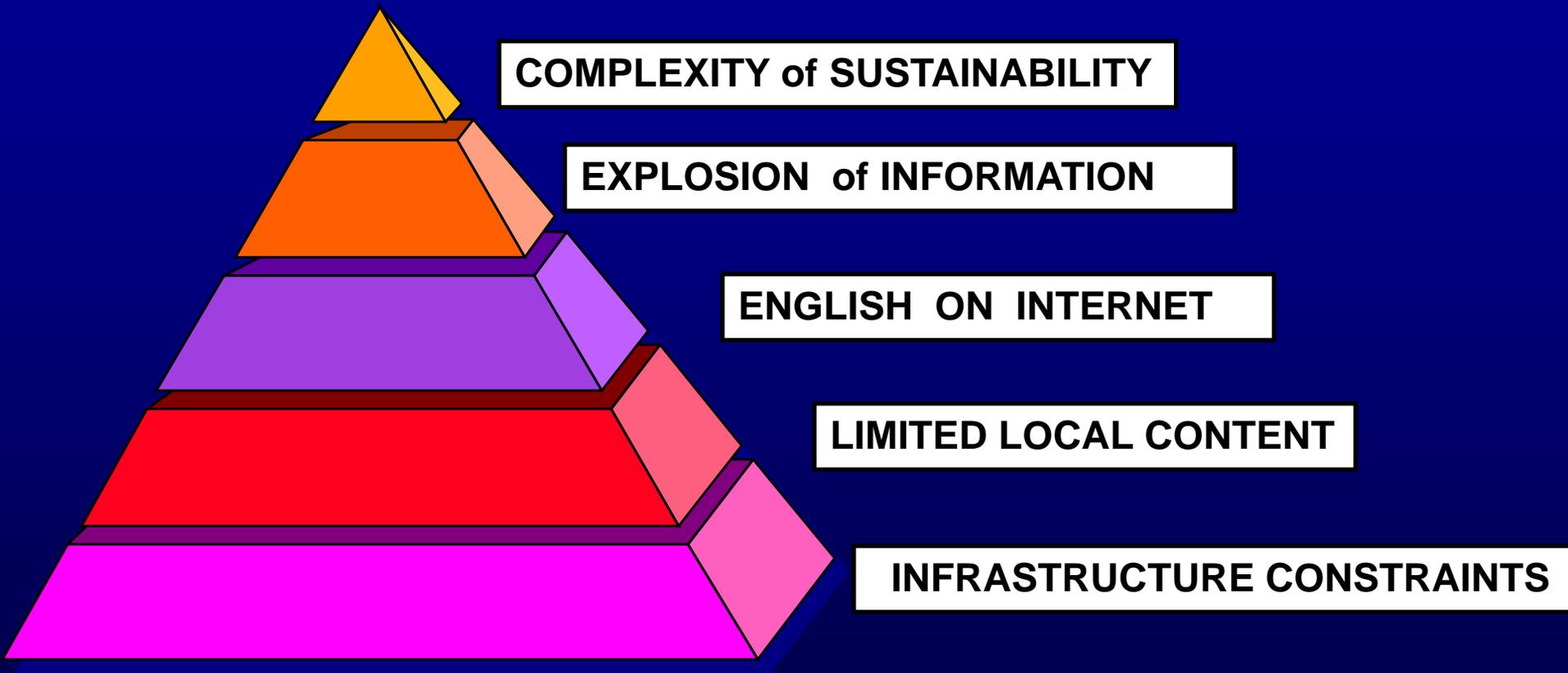


Global Internet Traffic : mid-1997





BARRIERS to KNOWLEDGE





Problems

- 1. Complexity of Sustainability & Knowledge Explosion**
- 2. Diversity of Users with Multiple Needs & Dispersed Capacities**
- 3. Barriers to Internet access in Non-English World & Limited Infrastructure**



Solutions

1. Conceptual Framework & Distributed Knowledge Management
2. Knowledge Networking & Strategic Partnering
3. Mirror Sites & Multi-lingual Functionality

Global System for Sustainable Development



Knowledge Meta-Networking for Decision & Strategy



WHAT is GSSD?

- **G**lobal knowledge meta-networking
- **S**tructured knowledge on sustainability
- **S**ystem for using “state-of-the-art”
knowledge management
- **D**ecision support collaborative platform



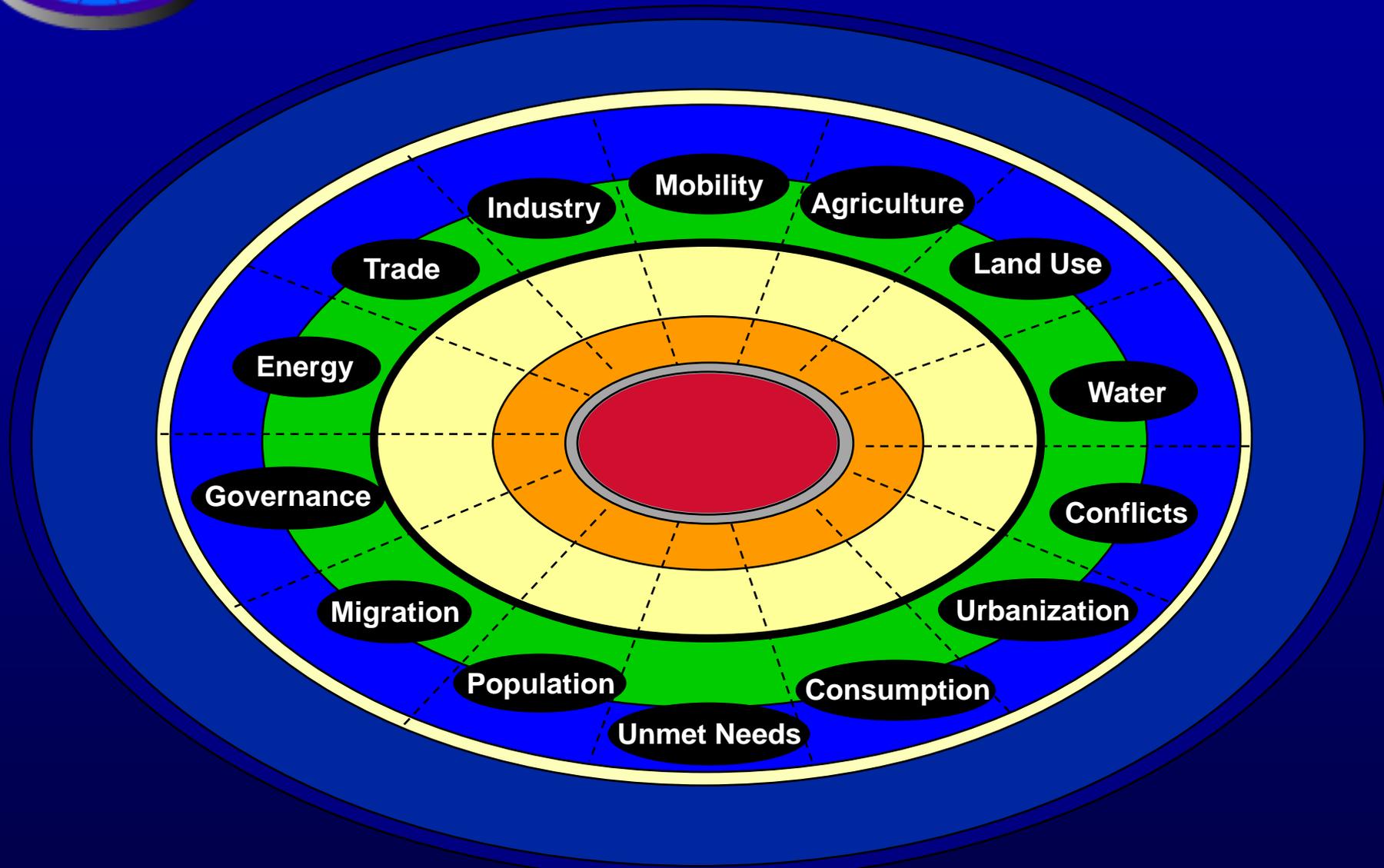
GSSD

Knowledge Base & “CyberLibrary”

- Evolving Internet Resources of roughly 250 Institutions
- Covering Multi-disciplinary & Diverse Views
- Contents of nearly 3000 sites reviewed, abstracted indexed & cross-referenced

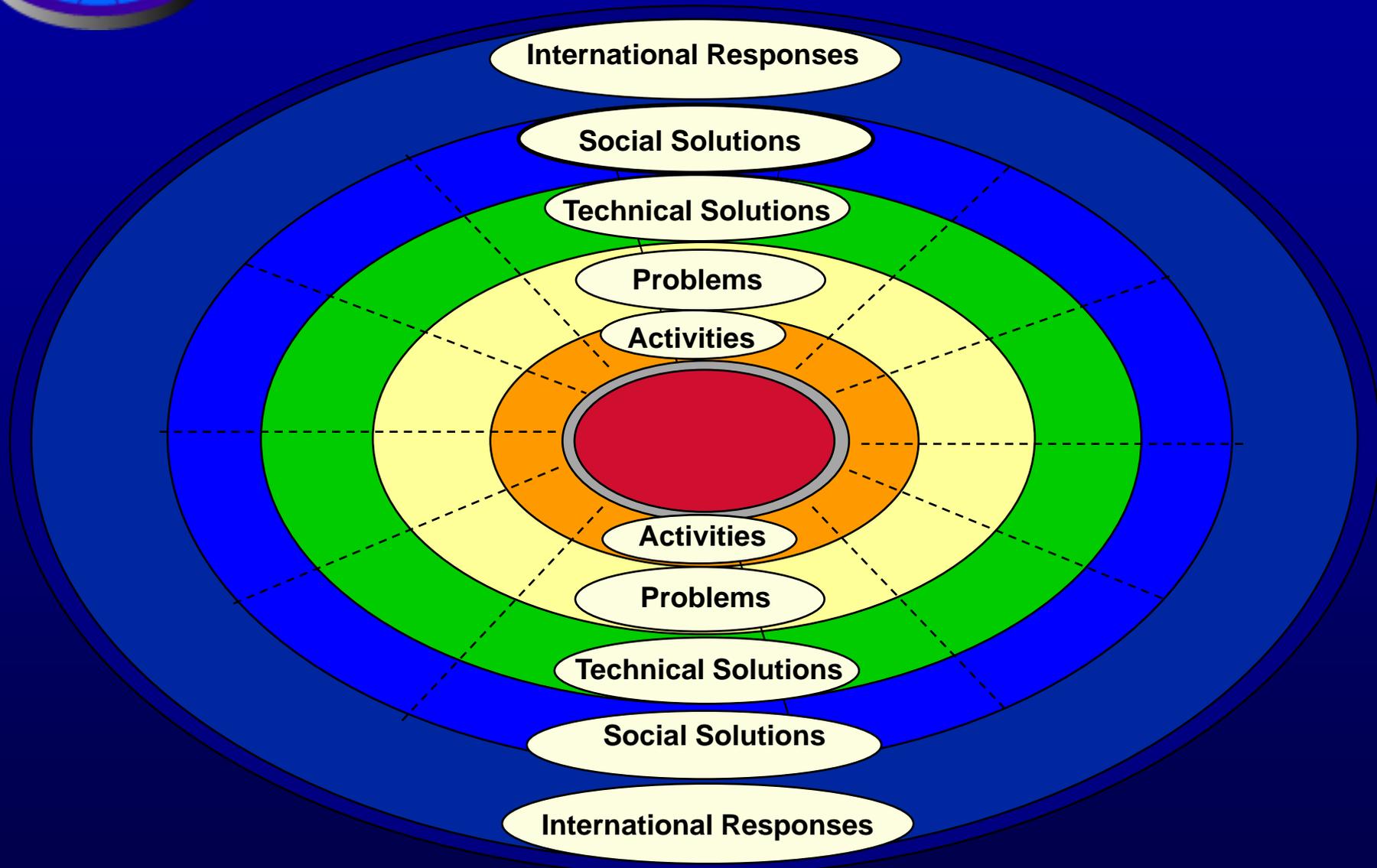


Conceptual Framework - Slices





Conceptual Framework - Rings





Knowledge Network

- **Organized system of discrete actors with knowledge producing capacity**
- **Combined through common organizing principles**
- **Actors retain individual autonomy**
- **Network enhances value of knowledge to actors & further expands knowledge**



Strategic Partnerships

- **Global complexities & geographic dispersion require partnering**
- **Distributed network allows work to be done where capacities exist**
- **Localization enhances diversity of users, interests & priorities**



Modes of Partnership

- Collaborative Research
- Content Provision
- Translation Centers
- Mirror Siting
- Targeted Initiative



Some Strategic Partners

- **Academe** **AUB, Ecole des Mines**
- **IGO** **GEF, UNEP**
- **NGO** **IISD, MISTRA, IUCN**
- **Government** **China ACCA21**
- **Corporate** **Lotus, Xerox, AT&T**
Sony (Env. Center)



Multilingual e-Functionality

- Improved access to knowledge
- Strategic uses of search options
- Provision of local knowledge base
- Reduction of knowledge gaps



Mirror Sites

Gains of Multilingual Functionality Plus

- Administrative Autonomy
- Reliable International Interactions
- Expanded Capacity



Multilingual Banner

MIT



<http://gssd.mit.edu>

Sistema Global para el Desarrollo Sostenible

全球可持续发展系统

Global System for Sustainable Development

النظام العلمى للتنمية المستدامة

Système pour le développement durable mondial

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决策知识网络



麻省理工学院

Systeme pour le développement durable mondial



Grand réseau de connaissance pour décisions et stratégies

النظام العالمي للتنمية المستدامة

ما هو الجديد

ابحث في ال GSSD

استعمال ال GSSD

تقارير ال GSSD

اتصل بال GSSD

زيادة موقع

اتحاد

الشبكة المعرفية الأم (الشبكة المعرفية العامة) لعمل القرار ووضع الأستراتيجيات

Sistema Global para el Desarrollo Sostenible



Meta Red de Conocimiento para Decisión y Estrategia



Mirror Site Locations





Current Initiative

- **Reduce Barriers to Technology Access**
- **Facilitate Uses of Sustainable Products & Processes**
- **Improve Supply-Demand Connections**
- **Reduce Persistent Technology Gaps**



Conclusion

Managing Complexity

- **Cyberspace Strategy as Policy Domain**
- **Voicing of Actors & New Leverages**
- **Leveling the Playing Field**
- **Accelerating Time & Reducing Space**
- **Enabling Globalization & Localization**