

Models of Knowledge Network Structures and Governance Systems

1. INTRODUCTION

This paper examines the governance of organizational networks and the impact of governance on *network effectiveness*. Examples of several relevant knowledge network models are provided including: UNDP Practice networks, ENRAP, UNEP global clearing houses are provided focusing on distinct structural properties. The paper provided an analysis of effectiveness in relation to the needs of the current project, examining conditions for the effectiveness of each form.

2. BACKGROUND – LITERATURE

Networks (regional and global) are increasingly common place in the organizational and institutional development literature. For problems that require **collective action**, organizational governance is also no longer sufficient – **network governance** is required to achieve broad, network-level goals. **Unlike organizations, networks are being governed without benefit of hierarchy or ownership.** In addition, network participants typically have limited formal accountability to network-level goals and conformity to rules and procedures is purely voluntary.

The “network as a form of governance” approach treats networks as the unit of analysis (in contrast to organizational). ‘Network’ is viewed as the mechanism of coordination, or what has often been referred to as ‘network governance’. For example, a network might be designed to support certain knowledge services such as referrals (e.g., identifying experts, comparative experiences) and for general information sharing. In the development field, knowledge **networks are increasingly employed for peer review, policy discussions, and identification of best practices.** The efficiency of networking has also increased as ICT and tools have become user-friendly and members become familiarized with what networks can offer.

2. BENEFITS AND EFFECTIVENESS OF NETWORK AS A REGIONAL COORDINATION AND KNOWLEDGE SHARING MECHANISM

Goal directed networks are established as formal mechanisms for achieving multi-organizational outcomes, especially in the public and nonprofit sectors where collective action is often required for problem solving. Based on my personal experience at UNDP, the effectiveness of the knowledge networks is a **function** of the actions of individual network participants, regardless of the overall governance form. However, when focusing on collectively generated, network-level outcomes or a service agenda linked to time bound indicators, the form of network governance, and the configuration and management of components surrounding the service lines, are critical factors for explaining network effectiveness.

Benefits of Online ‘Communities’ (Annex 1- UNDP type of Networks/Communities)

Online’s Communities of Practice are Knowledge Networks that offer great potential as a key instrument for empowering members by building capacity and employing ICT as a tool for advancing network goals. As an instrument for capacity building/development, online communities/knowledge networks properly supported provides an ideal forum for knowledge and information sharing between peers and colleagues around thematic work or interests. This provides an opportunity to bring relevance and cohesion to general development policy development, globally sourced by and locally transferred to field implementations.

3 COMPARATIVE EXAMPLES OF KNOWLEDGE NETWORKS AND KNOWLEDGE SHARING SYSTEMS (STRUCTURES AND GOVERNANCE) (ANNEX 2)

There are several excellent examples of model knowledge networks that can inform the approach and governance structure for a knowledge sharing network serving women’s agricultural development in the Asia Pacific region. Consideration of the comparative experiences however, is not intended to superimpose a network governance structure but to inform the development of the optimal network management approach. The comparative experiences selected consider the ‘how’ and ‘what’ of various groups, missions, mandates and services based on the context, collective needs and resources available. The principle is to develop a network approach that covers three core elements: *Network leadership, Network governance, and Network administration*. Considering this projects objectives, the capacity building knowledge exchange network must be responsible for policies and strategic direction, as well as providing leadership on the issue for the network members.

EXAMPLES

1. ENRAP (KNOWLEDGE NETWORKING FOR RURAL DEVELOPMENT IN ASIA/PACIFIC REGION),

ENRAP is IFAD-IDRC collaboration in order to leverage a growing body of useful information generated by development and made available on the Internet. The program, now in its second phase and running until the end of 2005, is designed to bring the benefits of accessing and sharing global information resources to IFAD-supported rural development projects in the Asia/Pacific region. Effective use of Internet and electronic communication by project staff and, ultimately, by project communities will contribute to the empowerment of rural people and help them better address their development objectives.

ENRAP’s goal is to help develop skills to access, manage and share knowledge relevant to IFAD project objectives and implementation, in collaboration with selected groups of

IFAD projects and local specialists. Potential users of the knowledge sharing system include project staff and their partners who work directly with rural communities and help make the knowledge available at the grassroots level. ENRAP investigates strategies, processes, methods and technologies to support rural communication and knowledge networking, and develops recommendations for future activities. This project will foster a culture for knowledge sharing and learning amongst all the stakeholders of IFAD projects.

The ENRAP network governance strategy takes a participatory communications approach and aims to engage all stakeholders in decision-making and collecting materials to be shared electronically and in traditional ways. The process of designing and implementing new applications is based on field visits, collective needs analysis, and local technical expertise. The central ENRAP Website (www.enrap.org) provides an electronic space for collaborative work and exchange of information. It allows for interactive database access, posting of documents and photographs in native formats by all users, conducting electronic conferences, and contributing web pages on line.

- Strategies, processes, methods and technologies to support rural communication and knowledge networking, and develops recommendations for future activities.
- Research and development in the area of knowledge networking and Internet applications at the local, national and international levels. Special focus is on methods and practical solutions fostering participation at the grassroots level.

Network activities include:

- Local electronic newsletters
- Agricultural market information dissemination
- Shared electronic libraries are examples of ENRAP-supported activities.

2. UNDP PRACTICE NETWORKS

The UNDP Practice networks were developed in response to management decisions to initiate knowledge management activities in order to enhance knowledge sharing and collaboration so that the organization would ‘work smarter’. The networks specifically aimed to enhanced capacity and performance of staff and improved programmes and projects. The primary users and target beneficiaries included the UNDP staff and partners. In 1999, the organization established 7 knowledge networks around their Practice areas (**democratic governance, poverty reduction, crisis prevention and recovery, energy and environment, interactive communications technology for development, HIV/AIDS, and management**).

The distinctive feature of the UNDP networks is the ‘Community of Practice’ Architecture which served to build trusting communities that support quality knowledge sharing through online communities. The distinctive component of the UNDP knowledge networks was the employment of **Knowledge Network Facilitators** appointed to each practice area to oversees, stimulate and regulate discussions, referrals and sharing of best

practices. Facilitators digest and consolidate questions and replies, maintain expert rosters and write practice newsletters. Other duties include developing thematic workshops and providing knowledge-based advisory services. Through ‘Practices’, UNDP offers four targeted Knowledge Services including:

- Networking and sharing knowledge between staff and development partners;
- Expert referrals and access to technical and program-related information;
- Technical support for program identification, design, formulation and review;
- Documentation and dissemination of Comparative experiences and Best Practices.

3. UNEP GLOBAL CLEARINGHOUSE ON SOUTH SOUTH INFORMATION EXCHANGE

The UNEP Global Clearing House on South South Information Exchange is a global initiative between three UNEP units (DRC, DTIE, DEPI). The GCH aims to enhance capacity and performance of global practitioners on environmental technology and environmental capacity building and also for promoting South South exchange. The GCH will serve the global community including UNEP and its development partners. Centralized global information system is being designed primarily as a web-based platform employing a range of approaches for the systematic collection of information targeted at promoting south south exchange. The network services although not finalized yet, will include:

- Systematic information sharing on environmental capacity building and technological information and promoting south cooperation.
- Expert referrals
- Technical support services

4. UNEP /CBD BIODIVERSITY CLEARINGHOUSE (CHM)

The Clearing-House Mechanism (CHM) of the Convention on Biological Diversity has been established further to Article 18.3 of the Convention. Its mission is to contribute significantly to the implementation of the Convention through the promotion and facilitation of technical and scientific cooperation, among Parties, other Governments and stakeholders. The clearing house supports UNEP and its partners. The CHM is the primary global cooperation and information network on the conservation and sustainable use of biological diversity, incorporating a range of communication vehicles from advanced Web approaches to personal contact. Network services include, research, strategy, implementation, evaluation, case Studies and workshops

The Strategic Plan of the Clearing-House Mechanism identifies three major goals:

- The promotion and facilitation of technical and scientific cooperation.
- The promotion and facilitation of information exchange among Parties, other Governments and stakeholders.
- A fully operational mechanism with participation of all Parties and an expanded network of partners.

The Clearing-House Mechanism consists of the following components:

- The CBD website, including its Information Centre.
- The network of national Clearing-House Mechanisms.
- Various partner institutions.

5. KM FOR DEVELOPMENT (KM4DEV) –BELLANET –IDRC

The overall goal of the KM4DEV network is to enhance the capacity of a community of international development practitioners who are interested in knowledge management and knowledge sharing issues and approaches. Through the KM4DEV online community, for example, the skills and approaches for facilitating knowledge sharing, as well as exploring new technologies to support knowledge sharing are explored. Thus KM4DEV attempts to improve knowledge sharing on KM and International Development and also improve knowledge of the "practice" of knowledge sharing. Network Services include broad information exchange, capacity building for programmes and projects and comparative experiences. KM 4DEV is essentially categorized as a community of interest group that provides a web based platform for targeted information exchange.

6. ASHOKA

Ashoka is a global nonprofit organization founded in 1980, with a clear target of supporting social entrepreneurs around the world. Today the organization has a staff of 150 people with a third of them based in the headquarters in Arlington, Virginia. Ashoka supports programs in 60 countries throughout the world and it counts with a network of 1700 Ashoka fellows. One of the relevant features for this analysis is the diversity of places where country offices are based. Instead of dividing the world in the traditional geographic definitions, they subdivide regions in "diamonds" based on the level of development in the zone. With offices in Argentina, Thailand, Nepal, Egypt, Brazil, Pakistan, Nigeria India among other places, and with 1700 Ashoka fellows coming from more than 60 countries the challenge to keep a fluid level of communication and to increase the sharing knowledge among its members turns to be an enormous challenge. Ashoka is expanding the number of people involved in the integration process. There is one "Diamond Integrator" per diamond, who is responsible for the successful integration of programs within that region. They have decision making inputs in terms of fundraising, marketing and hiring and make sure all programs share best practices. These "Diamond Integrators" report to the Co-President, thus they may have a clear picture about what is going on outside the headquarters.

7. GLOBAL WATER PARTNERSHIP (GWP)

The GWP is a global coordination network concerned with integrated water resource management (IWRM). The mission of the Global Water Partnership is to "support countries in the sustainable management of their water resources." GWP organization is a combination of Regional Partnerships, Consulting Partners, Steering Committee, and

Technical committee, Financial Partners, Secretariat & Resource Centers. Also integral to achieving the goals of the GWP partnerships are the following bodies: the Associated Programs, the GWP Regional Partnerships and the exponentially growing number of GWP Country Partnerships.

Objectives GWP Strategy (2004-2008)

Broadly, GWP networking has been initially concerned with four main areas including, 1. Build partnerships that take action to introduce and implement integrated water resources management. 2. Ensure GWPs Associated Programs provide required strategic support to the regions and countries 3. Complete the 'IWRM Toolbox' as a source of real-life lessons learnt from implementing IWRM. 4. Construct a portfolio of regional actions on IWRM.

The GWPs main global network objectives:

- 1 To clearly establish the principles of sustainable water resources management.
- 2 Identify gaps and stimulate partners to meet critical needs within their available human and financial resources
- 3 Support action at the local, national, regional or river basin level that follows the principles of sustainable water resources management
- 4 Help match needs to available resources.

The GWP Strategy for (2004-2008) outlined a plan/objectives to ensure that IWRM is applied in a growing number of countries and regions as a means to foster equitable and effective management of water. This is expected to be achieved by the means of the following five consolidated outputs:

1. Facilitate IWRM water policy and strategy development at relevant levels
2. IWRM programs and tools developed in response to regional and countries needs
3. Linkages between GWP and other frameworks, sectors and issues ensured
4. GWP partnerships consolidated at relevant levels
5. GWP network effectively developed and managed

Knowledge management concepts such as knowledge networks are applied to all five of GWPs (2004-2008) strategic output targets. These activities support GWPs mission as a service oriented and global knowledge based organization.¹

8. INTERNATIONAL CRISIS GROUP

The International Crisis Group (Crisis Group) is an independent, non-profit, non-governmental organization, with over 110 staff members on five continents, working through field-based analysis high-level advocacy to prevent and resolve deadly conflict. Crisis Group's approach is grounded in field research. Teams of political analysts are located within or close by countries at risk of outbreak, escalation or recurrence of violent conflict. Based on information and assessments from the field, it produces analytical reports containing practical recommendations targeted at key international decision-

makers. Crisis Group work under a scheme of advocacy and field offices, placed geographically in different places. Crisis Group with its main office in Brussels has advocacy offices in New York, London, Washington and Moscow. The institution has 15 field offices in cities such as Amman, Nairobi, and Bogotá among others.

9. PARTNERS IN HEALTH

Partners in Health (PIH) are a Boston-based non-profit organization which brings the benefits of modern medical science to those most in need of them. Today, PIH has partner projects in seven countries spanning four continents, including Haiti, Guatemala, Mexico, Peru, Russia, Rwanda, and USA. Totally, PIH has 17 offices worldwide. Aside from Boston headquarters, all site offices have different functions, mostly operations-related; staffing in each country varies enormously depending on the scope and type of work they conduct.

In PIH country managers report to the Program Manager or to the Chief Operating Officer (both based in Boston) and communicate directly with all personnel at the sites and in the Boston headquarters. Country-office reporting is dependent on the project in question and on donor demands. Informal reporting by e-mail is ongoing. Frequency of formal reporting varies greatly and occurs either on a predetermined schedule, ranging from daily to annually, or at the time of project completion. In general, the expectation is for monthly, quarterly, and annual reporting on both programmatic and financial data.

10. OXFAM AMERICA

Oxfam America is a nonprofit, international agency that funds self-help development projects and disaster relief in poor countries in Africa, Asia, the Americas, and the Caribbean. It also prepares and distributes educational materials for Americans on issues of development and hunger. Grants support small projects overseas which reach into villages and rural areas where local groups are working to increase food production and economic self-reliance. In the United States, Oxfam also funds development projects, conducts educational campaigns, and speaks out about public policies that affect its grassroots development work abroad.

The name "Oxfam" comes from the Oxford Committee on Famine Relief, founded in England in 1942. Over the past five decades, Oxfam has gained a global reputation for innovative yet realistic aid to some of the poorest people of the world. Oxfam America, based in Boston, was established in 1970 and is one of seven autonomous Oxfam's around the world (Montreal and Ottawa in Canada, Great Britain, Australia, Belgium, Hong Kong, and the United States). Oxfam America often collaborates with other Oxfam's and other international voluntary agencies by funding specific parts of large development programs.

Oxfam works in the rural areas of over 26 countries in Africa, Asia, the Americas, and the Caribbean. It funds projects aimed at increasing the ability of low income people to produce their own food or have a secure source of income to purchase food.

In general a knowledge management system within Oxfam America is quite new, through the department of evaluation they will implement the APPLE system (annual program planning exercise) that it will be tested through different units. It is designed as a system of evaluation that will cover a wide variety of topics including information sharing, learning systems and the final use of the information.

4. COMPARATIVE ANALYSIS

Developing a well conceived knowledge networking strategy for thematic knowledge exchange will improve worthwhile knowledge exchange. At the planning stage, the conceptual differences concerning the wide range of approaches available are significant. For example, the fundamental difference between a Community of Practice and a Community of Interest determines the course of action to be taken. This also has financial implications as investors will certainly have to pay more to invest in systems for quality information's exchange. UNDP has great experiences with developing communities of practice. In determining how a network is to be approached; for example, a plan must consider what services, who manages, facilitated or non -facilitated and battle with issues concerning network resources. At the planning stage, the rules for participation are also determined.

Networks are defined as group's of autonomous organizations and individual that work together collectively and collaboratively to try to achieve not only their own goals, but also, the collective goal of the network as a whole. Such networks may be self-organized, by network members themselves, or may be mandated or contracted... As multilateral collectivities, the conclusion based on this review is that knowledge networks are very complex entities and that to determine the best approach and the governance structure, consideration of context (resources, membership, and knowledge sharing goals, technology available, and audience).

A participatory communications approach (ENRAN, UNDP) with a focus on building a Community of Practice is recommended but at this point in the analysis critical question remain unanswered. These questions can be explored today (to be followed with a knowledge needs assessment exercise). For example, although we assume the new network is to be an inter-organizational network, apparently with an emphasis on **connection** over **knowledge collection**, the question remains about the intension and this also has consequences for action. For example will the COOP women's network only being members of the network, or if they plan to have other members?' and also the question on the types of content member will be willing to share / manage?