Health, Biodiversity and Traditional Medicine – Strengthening Linkages for Community Health

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“Health is not a commodity that is given. It must be generated from within. Health action should not be imposed from the outside, foreign to the people; it must be a response of the communities to problems they perceive, supported by an adequate infrastructure. This is the essence of the filtering inwards process of primary health care.”

Dr. Halfdan Mahler, Former Director General of WHO
A Health Sector Paradox

- Immense advances in human well-being coexist with extreme deprivation in many parts of the world (World Health Report 2006), Importance of PHC (WHR 2008)
- One third of the global population has no regular access to minimum healthcare (Bodeker et al. 2005).
- Areas with no modern health care facilities are abundant in natural resources and traditional medical knowledge
- Resource rich, practice poor situation
Traditional Medicine and Relevance

- Traditional medicine (WHO 2000): is ‘the sum total of the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical and mental illnesses.’

- Estimates suggest high continued use around the world (WHO 2008)

- Inherent relationship with bio-cultural diversity - diverse, ecosystem and often community specific

- Highly relevant in the context of primary healthcare as it is available, accessible, affordable, culturally accepted
Aspects of Relevance

- New pharmaceuticals
- Traditional Medicine/biodiversity
  - Health security in PHC
  - Livelihoods
  - Spiritual/Recreational Sacred healing sites, groves
- Food, health supplements
Traditional Medicine Integration: Three Processes

Formal – WHO
- process quality, safety, efficacy, access, rational use, national regulations, health focus

Informal – civil society organizations, universities/institutes, local communities – biodiversity focus

Markets
- Health products
Policy Context: Biodiversity, TK and Community Health

- Alma-Ata (1978) – integration of traditional medical knowledge and health practitioners

- Chiang Mai (1988) - “saving the plants that save lives”.

- Agenda 21 (1992) - Appropriate integration of TRM in national health systems; research into TK preventive and curative health practices

Policies – Ecosystem, Health and Wellbeing

- UNHCHR (2000), right to highest attainable standard of health – States have “obligation to refrain from prohibiting or impeding traditional preventive care, healing practices and medicines.”

- UNEP-IISD (2004) - Ability to use traditional medicine is one of the 10 resources of wellbeing

- COHAB (2007) - Well-being and health care needs through the conservation of biodiversity and associated TK systems
Conservation of Natural Resources & Protection of TK

**UNCTAD** - protection of TK and promoting trade and development opportunities for developing countries through traditional medicine.

**CITES** - Sustainable use of natural resources by monitoring trade of endangered species of flora and fauna.

**FAO** - NTFP, medicinal plants policy, conservation and research

**UNIDO** - industrial use of medicinal plants, improved technologies for standardization, and supporting capacities of member countries.

**WIPO** - IPR protection of traditional medical knowledge. *Sui generis* model (with UNESCO 1982)

- The Commonwealth Secretariat, EU, World Bank and WTO policy guidelines on traditional medicine.
Cultural Heritage, Indigenous Rights, Development

• Indigenous and Tribal Peoples Convention (ILO); Convention for the Safeguarding of Intangible Cultural Heritage (2003); UN declaration on the rights of indigenous peoples (UNPFII, 2006)

• UNESCO, 2005 – positive contribution of TK to sustainable development […] need for protection and promotion

Knowledge Systems, Education, Research

• UNESCO-ICSU - Declaration on Science and the use of TK

• UNDESD - Indigenous learning approaches and transmission of TK, social learning, reflexive learning in development

• IPBES – assessment of changes to biodiv and ecosystems – attempting to integrate TK in mainstream knowledge for assessment
Convention on Biological Diversity (CBD)

- CBD - calls for conservation, sustainable use and ABS

- COP 5 - Medicinal plant bio-enterprise to sustainable development, intellectual property rights, access and benefit sharing

- COP 10 – Affirms the need to identify and strengthen priorities on biodiversity and health between relevant institutions and national agencies dealing respectively with public health and environmental resources

- Community protocols as part of international regime on ABS

- COP-12 – Decision on Health and Biodiversity
### Initiatives – Health, BD and TRM

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<tr>
<th>COHAB - Convergence between CBD and WHO</th>
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<tr>
<td>Ecosystems and human wellbeing – Health synthesis WHO report – MEA</td>
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<td>Harvard report – Biodiversity: its importance to human health</td>
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<td>UNESCO-SCOPE-UNEP – Biodiversity, health and wellbeing</td>
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<td>Role of biodiversity in healthy ecosystems in supporting child health (EI)</td>
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<td>UN Resolution on ‘Harmony with Nature’</td>
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**Indicator(s) on the Health & Well-being of Communities Directly Dependent on Local Ecosystems**

**Inadequate focus on community health through TK**
Key Themes

- Natural resources
- Knowledge resources
- Human resources
- Role in public health
- Protection of knowledge
- Education
- Intercultural approaches
- Equity and livelihoods
- Indigenous rights
- Socio-cultural landscapes
- Institution alization
- Partnerships networking
**Natural Resources**

**Context**
- 50,000 - 70,000 plants used as medicine, 3000 are traded; 21% are endangered (Schippmann et al. 2006).

**Interventions**

**Policy**
- National inventory of medicinal resources, threat status, trade status
- Community based participatory models of conservation, biodiversity registers, community protocols, encouraging cultivation

**Case studies**
- Rapid threat assessment (CAMP), insitu/ex-situ conservation models, sustainable harvest
Knowledge resources

Context

• Some knowledge is codified, even institutionalized, much in oral form-in public or private domains, level of expertise heterogenous, Internal methods differ despite underlying epistemological coherence, natural product development is time consuming, resource intensive

Interventions

• Participatory assessment methods- reflexive learning process

Policy focus

• Community level assessments, intergenerational transfer, interdisciplinary ethno botanical studies based on community needs

Case studies

• DALHT, Tramil model, Observational clinical studies
Human resources

Context

- Between 60-70% of child deliveries are done by untrained birth attendants, high populations to healer ratio, diverse specialty areas, social legitimacy – no legal recognition, Selective use

Interventions

- Organizing, self regulatory systems, accreditation systems

Policy Focus

- Integration of THPs, recognition and support as per local needs, self regulation, referral systems and better relationship with health professionals, access to resources, protection of IPRs, collection of good practices and upscaling

Case Studies

- MPCN healers model, Prometra Healers Training, Srilankan healers network
Public Health Practices

Context
• Several field level models of community health
• Inadequately explored in national programs
• Issues of quality, safety, efficacy, access, rational use

Intervention
• Identification, assessment and promotion of public health practices

Policy
• Mainstreaming, research and education

Case studies
• Home Gardens, HIV, Malaria, Anaemia, Okinawa food study, Haichi system, Thai-Burma border refugee program, water related practices
Equity and Livelihoods

Context

- Rural poverty of source providers - Iniquity in supply chain
- Resources – To achieve development objectives in local communities
- Equitable income result in better conservation, health outcomes
- Initiatives short lived – technological challenges, supply-demand
- ABS models – few beyond rhetoric

Interventions

- Good manufacturing practices and certification
- Collection and sale of NTFP, cultivation of medicinal/nutritional resources, semi-processing, small scale production of medicines and related health products, capacity building at various levels

Policy Focus

- Community based enterprises, ABS implementation

Case Studies

- Local enterprises (GMCL), Access and benefit sharing
Intercultural Approaches - Education, Research

**Context**
- Differing worldviews and ways of understanding; TK is often informal, secret and sacred, spiritual, time related and non-linear in nature
- Methods are also subjective, intuitive and experiential
- Challenges in validation, creation of universal standards
- Pluralistic existence and appropriate integration

**Interventions**
- Integrative transdisciplinary approaches to research, education

**Policy**
- Education within the traditional medicine community, orientation of health professionals, appropriate research models

**Case Studies**
- Integrated Hospitals, CAPTURED transdisciplinary models
Protection of Knowledge

- Delineating between prior art and innovation
- Reducing natural product exploration
- Ensure easy and free access to knowledge, social equity
- To be promoted as active social traditions

Interventions

- Databases, community knowledge registers, biocultural protocols

Policy

- Community sensitive methods for protection, at the same time allowing innovation and practice as active social traditions

Case Studies

- TKDL, Community knowledge register, biocultural protocols
Partnerships and Networking

Context
- Strong partnerships are built between local civil society organizations, communities, educational institutions, scientific establishments, private sector, multilateral organizations and other relevant stakeholders
- National or International recognition spurs scaling up processes of community activities

Interventions
- Several programs and networks

Policy focus
- South-South cooperation, international networking, learning exchanges

Case Studies
- SGP, Compas, Equator initiative, Asia-Pacific Traditional Medicine and Herbal Technology Network (APTMNET-UNESCAP)
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<th>Reflections</th>
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<td>Popular subject in the 1990s – lack of innovative ideas?</td>
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<td>Success pilot models, but scale of operation not enhanced</td>
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<td>Failure of PHC agenda (health for all by 2000)</td>
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- Inadequate attention to synergies in implementation
- Back to health access, barefoot doctors? a rightful place for TK?
At Local Level

Difficulties in local integration – health professionals were an impediment

Integrated Assessment is most important

Involvement of Local communities - in conservation and resource management rather than improvement of local health

Governance issues at local level – forest departments, NTFP collectors, traders, industries

Protection focus – not promoted as active social traditions or intergenerational transfer of such knowledge