

Intellectual Property Rights and Technology Transfer: Some suggestions and proposals

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The issue in hand

- While IPR can be a barrier it is part of a larger problem which includes lack of development of technologies, lack of capacity to absorb technology and absence of consensus of TT related issues
- Hence multiple solutions are needed and they should not contradict each other
- We should take into account the Rise of the South and stop discussing this TT as a North-> South issue. Instead use the UNFCCC to develop trilateral collaboration in development and dissemination
- Article 66.2 – making it workable
- Patent grant- incentivize EST related patents
- Develop an enabling framework
- Identify all barriers to TT including IPR and develop solutions
- Technological Commons and alternative models in development, transfer – what can we learn from experiences in drugs, life sciences

Rise of the South and Its implications

- Although south lags behind North in many sectors in clean energy south is moving ahead
- Development of indigenous capacity in south for R&D, acquiring technology and absorption
- Big developing countries like China, India, Brazil and South Africa have well laid out plans for tackling climate change and see technology as a component. EG India solar mission, Chinas thrust on solar and wind
- So if they can come together and undertake joint R&D it will be useful for them and LDCs instead of relying only on North
- The UNFCCC TT mechanism favors bi-lateral and multi-lateral collaboration
- It should be expanded to facilitate South-South Collaboration and North-South-South collaboration through capacity building and development of mechanisms to bring them together e.g. clearinghouses for EST under UNFCCC

South-South Collaboration

- Growing technological capacity-evidence in publications, patents, share of hi-technology exports in Trade
- Successful South-South collaboration in sectors like biotechnology
- Renewed thrust of technology in Climate Change Action Plans resulting in more investments, incentives and increasing importance of renewables
- Firms in South with global linkage in R&D, production and R&D in North and production in South, acquiring firms for technology, capacity to compete on scale of production
- S&T and TT are more globalized than ever and thrust on nanotechnology, emerging technologies in developing nations like South Korea, Brazil, India, China and South Africa
- Innovation Capacity- South Korea is ranked 8th in Global Cleantech Innovation Index 2012, India ranked 12 followed by China, Brazil

South-South Collaboration

- China doubles wind capacity between 2005 and 2009
- TT through Merger and Acquisition, licensing, joint development of technology, producing for global markets while production in South
- TT and Technology Absorption Capacity- Gaps exist but late comer NICs can be helped to overcome this
- Use the high level of general innovation to develop capacity in specialized innovation
- Barriers to enhanced South-South (Coravagilla) protectionist anti-competitive trade policies, absence of coherent and comprehensive international regulation of trade in EST
- Irrespective of Doha Round South (G77&China) should develop framework to facilitate TT, trade among South on ESTs and work together to ease flow of trade, investment in EST in South
- Identify sectors where South-South can work and help LDCs to use this for their climate change plans
- Developing Country A-Developing Country B working with LDC C to address its technological needs by TT, capacity building, customization of technology

South-South Collaboration

- Explore synergies in South-South
- BASIC Group can develop a framework to facilitate this within BASIC
- Regional framework in which developing countries and LDCs can come together to promote TT- South Asia a potential candidate for this
- Identify few sectors like wind where South-South collaboration can make a difference- start small, scale up and expand
- South-South framework on TT, IP licensing, joint development and sharing technology
- Develop a South-South clearinghouse for ESTs from South for South for developing countries and LDCs
- Explore how UNFCCC Technology Mechanism can promote this
- UNCTAD, FAO, UNIDO can help such South-South collaboration through their expertise and help developing countries to provide technology to LDCs

South-South Collaboration

- Can CGIAR be a model for joint R&D If not what models are there
- Regional Specific Networks linked to global R&D networks in South
- Networks in sectors involving industry, academic and promotional agencies to develop plans for different sectors e.g. solar, wind
- Pooling available technologies in energy efficiency enhancement, develop of crop varieties for climate change, improvement in manufacturing capability and customization of available technologies/processes
- Barriers : 1) Lack of framework to implement
- 2) Uneven levels of absorption capacity
- 3) Fear of dumping and concerns of domestic industry
- 4) Finance and Investment
- 5) IPR issues and licensing and concerns about IP theft/misappropriation

But a beginning has to be made as South-South collaboration can be game changer in climate change TT

Article 66.2

- The gap between objectives and activities so far is huge
- North-South divide and concerns of LDCs
- Revisit 66.2 by incentivizing private sector participation in TT
- Expand the scope to include North-South-South collaboration in TT

Example Denmark, India and a LDC can work together with Denmark being main Technology Transferor

Use tax incentives (proposed) under 66.2 TRIPS Council can publish a list of permissible incentives and schemes for TT under tri-lateral and bi-lateral collaboration

Bring in UNCTAD, UNIDO to promote this

If EU, USA and developed countries take a flexible stand TT through 66.2 can be enhanced within WTO framework

Push and Pull Mechanisms

- Push programs- support for incentives
- Pull Programs- Sharing of Costs or Rewards and payments
- Push program can reduce the cost of R&D
- Pull programs - stimulate development, diffusion and acquiring technology
- Hybrid approach – use Push and Pull together to address multiple issues by combining appropriate push and pull mechanisms
- Lessons from medical R&D for climate change
- 1) Carefully developed AMC, Prize mechanism can for diffusion
- 2) Link this with climate finance incentives
- 3) AMC can be part of technological modernization
- 4) Use IP creatively in push and pull mechanisms
- 5) Health Impact Fund- a potential model where patentee is rewarded based on impact hence incentive to TT/diffusion
- 6) Open Source approach with hybrids (push-pull) for development and transfer
- 7) PPP model in drug development resulted in Product Development Partnerships (GAVI, DNDi) – this model can be used in climate change development and TT

Patent System- Reward for Development and TT

- Lessons from Patent Offices Initiatives to prioritize clean technology patent applications – identify their relevance for developing countries
- Can patent grant be linked to commitment to transfer/commercialize technology with an incentive for speedier consideration of other applications of applicant
- Fast tracking patents necessary but may not be sufficient as real barriers may be in using patent information, acquiring patents/licenses and dealing with multiple patents for a technology application
- Develop institutions like clearing houses that work with PCT and patent offices to enable better TT
- Licensing – Develop alternative licensing models that facilitate sharing of TT by academic institutions, universities
- Incentives for developing patent pools in ESTs, identify technologies in expired patents, in public domain to develop pools that can use them
- Information Intermediaries and honest brokers in TT and sharing of technology are needed to meet needs of patentees and users
- So we need to think in terms of new incentives and mechanisms that function within patent system and work to facilitate development and TT

Technological Commons

- Open Source and Open Innovation – link this with South-South
- Lessons from pre-competitive collaboration in life sciences and post-genome developments in sharing, accessing and developing protected commons
- Eco-patent Commons
- Creative Commons based licensing
- Lessons from Open Source Software Commons and Open Source communities for climate change
- Technological Commons can be developed, maintained and defended by entities that act as a trustee for all stakeholders
- Govt. organizations can develop such entities that will facilitate sharing and enhancing access

Conclusion

- These are some of the ideas which I think deserve further exploration
- Multiple approaches necessary as this is a wicked problem
- Can G77/China can work together in giving shape to some of them
- I have written on these in my publications while work-in-progress deals with some of these in detail
- THANKS