Developing Country Perspectives on Intellectual Property

Gross National Income Per Capita

1. **High National Income Per Capita ($9,266 or more) - 50 countries**
2. **Medium National Income Per Capita ($2,996 to $9,265) – 39 countries**
3. **Low National Income Per Capita ($756 to $2,995) – 51 countries**
4. **Very Low National Income Per Capita ($755 or less) – 65 countries**

What is the average family income in Maine?

a. $28,828
b. $33,596
c. $42,195
d. $49,391
e. $60,588

In terms of per capita income, Maine ranks rather low (36th out of the fifty states for 2000)

The richest fifth of families in Maine have incomes 2.8 times greater than the middle fifth and 8.3 times greater than the lowest fifth.

Lecture and Interview with Vandana Shiva

Biopiracy: The Plunder of Nature

How does she argue that patents are a new form of colonialism?

What of value exists in the south that western cultures would like to mine?

Explain what she means by "terminator technology."

Western Perspective:
manipulation at the genetic level will give the world superior products

Third World Perspective:
the more global corporations can manipulate living structures, the more they can control food and medicine

Who feeds the world?

Western Perspective:
agribusiness, the corporate farm

Third World Perspective:
women and small farmers working with biodiversity - more productive in long run than monocultures

What are the effects of global support of patents and intellectual property rights generally?

Western Perspective:
protect the innovator or creator and prevent piracy

Third World Perspective:
rob the knowledge of the poor and serve as an instrument for piracy (Brazil)

Comment of Prof. V. Chowdhury to V. Shiva

"What is the alternative at a time when no country can opt out of the WTO - it's not a piece of paper madam - it is a commitment that countries have to make or they will be pariah countries and we cannot afford to be a pariah country - please react."

Her response?

- become engaged, rewrite the rules to make them fairer

"A Taste of Our Own Poison"
Lessig

- developing nations getting organized and should
- most recent round of trade talks failed because U.S. subsidizing of agribusiness not on the table
- link reductions in U.S. subsidies to increases in IP protection?

"Integrating Intellectual Property Rights and Development Policy"
Commission on IPR
London, 2002

Conclusions?

Edith Penrose (1951) economist

Countries with little export trade in industrial goods and few, if any, inventions for sale have nothing to gain from granting patents on inventions … patented abroad … except the avoidance of unpleasant foreign retaliation in other directions

Jeffrey Sachs (2002) economist

“may well be the case that the tightening of IPRs may slow the diffusion of technology to the world’s poorest countries”

Empirical Work (2002)

Can IPRs contribute to promoting effective national systems of innovation to enhance the positions of developing nations?

-No strong correlation

Main Conclusion:
For those developing countries that have acquired significant technological and innovative capabilities,there has been an association of “weak” rather than “strong” forms of IP protection in the formative period of economic growth.

Approaching IP as a Human Right
UNESCO

“Copyright as a Human Right”

- response theories emerging from the interests of developing nations

intellectual property as a universal human right vs. economic interest

human-rights approach recognizes:
• author, artist, inventor, or creator can be a group or a community as well as an individual
• intellectual products have an intrinsic value as an expression of human dignity and creativity
• works are not first and foremost economic commodities
• implicit balance between the rights of inventors and creators and the interests of the wider society
• predicated on the centrality of protecting and nurturing human dignity and the common good.

human-rights approach:

• sensitive to the interconnections between intellectual property and the rights 'to take part in cultural life' and 'to enjoy the benefits of scientific progress and its applications'.

• type and level of protection must facilitate and promote cultural participation and scientific progress and do so in a manner that will broadly benefit members of society both on an individual and collective level.

• excludes inventions from patentability that offend against human dignity and ethical and moral principles recognized in member states.

• new types of property rights required …

At present, traditional and indigenous knowledge and artistic works rarely qualify for intellectual property protection and for that reason are vulnerable to expropriation and inappropriate utilization by persons outside the group.

Implementation of such model laws affect wealthier nations?

Developing Country Perspectives on Information Infrastructure & Technology

Information Infrastructure and Sustainability

Some Policy Issues

Amitabha Pande

Challenges of sustainability

Issues of sustainability pose the greatest challenge for policies and institutions of governance

Sustainable Development vs Sustainable Consumption

Before we talk of 'sustainable development' let us look at issues of 'sustainable consumption' because modern societies and economies are consumption driven

Global Consumption Disparities

20% of the worlds' richest account for 86% of total private consumption expenditures. The poorest 20% only 1.3%

The richest fifth consume 45% of all meat and fish, the poorest fifth 5%

58% of total energy, the poorest fifth less than 4%

Global Consumption Disparities

Consume 84% of all paper, the poorest fifth 1.1%

Own 87% of the worlds vehicle fleet, the poorest fifth less than 1%

Account for 53% of CO2 emissions the poorest 5th for 3%

Source: UNDP, Human Development Report, 1998

Implications

Disproportionate consumption on the part of the rich contribute to reduced consumption on the poor by causing a strain on overall resource availability and reduced affordability

Pollution and waste generated by excessive consumption far exceed the earth's sink capacities to absorb and convert them

Implications

Global warming plays a havoc with the harvests of the poor, rise in sea levels, permanent flooding of large areas, increased frequency of extreme weather conditions, extinction of some species, spread of infectious diseases and sudden and savage flips in different climates

Implications

Number of water scarce people expected to soar from 550 million to 3 billion by 2020

Global water availability has dropped from 17,000 cubic meters per capita to 7000

Sixth of world's land area is now degraded

Implications

Forest area per square km has fallen from 11.4 square km to 7.3

Wild species becoming extinct 50-100 times faster

Catch 22

What will happen if the poor aspire to similar levels of consumption to improve their lot?

Imagine 1 billion Indians engaging in fossil fuel consumption to match that of America

Catch 22

Downward spiral of forestry and environment requires the poor to accelerate consumption growth leading to further environmental degradation and decreased resource availability drawing them further into poverty

Damage inevitable either way

Sustainable Development

Concept of 'sustainable development' still comfortably fuzzy

Reluctance to discard linear mechanistic and techno-economic models of growth

Compromise solutions aiming to incorporate 'sustainability' as a constraint into conventional growth models doomed to failure

Policy Issues in this Context

Do we support consumption and production patterns which unquestionably accept unbridled consumer choice as a fundamental value?

Are economic and technological solutions sufficient to change unsustainable forms of production and consumption?

Policy Issues in this Context

Is more technology an answer to problems created by technology in the first instance?

Some Myths

Science and technology are socially, ethically and politically neutral

Technology can be taken out of the realm of political debate

Equivalence relationship between concepts of industrialization, modernization and technological and social development

People vs Systems

In this overall scenario what are the policy issues for information infrastructure developments?

People Purpose Process

As distinguished from

Strategy Structure Systems

People

Who is/are not 'people'?

Who own, control and manage information systems? Who do information infrastructure belong to?

Who needs information infrastructure? Who have articulated these needs?

People

Why should anything be done 'for' the people?

In other words fundamental issues of democracy

Demos - people
Kratos - strength

Not People

The followings are ‘not people’

- A Leviathan called the ‘State”

-A juggernaut called ‘technology’

- A predator called a ‘private firm’

Not People

All three have a self interest which often conflicts with the interests of people.

If sustainability is our goal, the information systems have to clearly de-link themselves from the self interests of these three

Information Infrastructure vis-à-vis People

In the hands of the monolithic State an information infrastructure can become a powerful tool for information control and manipulation of civil society

In the hands of technology producers, an information infrastructure is merely a creator and generator of demand for their products and services

Information Infrastructure vis-à-vis People

In the hands of the private firm, an information infrastructure is an instrument of cornering market share and perpetuating unsustainable consumption

Towards Utopia

What is the challenge for information infrastructures?

Endorse, support and accelerate the creation of a social environment and forms of governance and power structures which provide the framework for the expression of collective initiative and community control as well as the development of the full capabilities and creativity of the individual

The Utopia – Essential Constituents

Ecological soundness
Low energy inputs
Use of renewable and recyclable materials
Decentralized industry orientation
Integration with nature
Democratic politics
Decentralization generally

The Utopia – Essential Constituents

Agricultural Diversity

Community Control

Multi-disciplinarity

Science and technology not merely dependent on specialist elites

The Utopia – Essential Constituents

Requires a social system made up primarily of small, relatively autonomous and self sustaining communities independent of central decision making.

Mahatma Gandhi Village Republics

Romantic?

Fanciful?

Lessons from Internet

Before dismissing it as such, let us just see what the 'Internet' revolution has done?

A mushrooming of small, savvy entrepreneurs coming together to form small but highly profitable businesses.

Redefined relationship between home, the neighbourhood and the workplace. A new geography of relationships.

Lessons from Internet

Giant IT trans-nationals are nothing more than a very large number of highly decentralized, geographically spread, small groupings that are fully networked, working under a common umbrella. The monolithic enterprise is the dinosaur of the past.

Lessons from Internet

New forms of economic exchange relations – knowledge barter, a knowledge currency

Hierarchies shattered. Pyramids replaced by networked nuclei

Distinctions between owners, shareholders, managers and wage laborers blurred to the point of obliteration.

Lessons from Internet

These fundamental changes occurred within a decade. Do we still dismiss the dream of decentralized interconnected, self-governing, self-regulatory sustainable communities as idle fancy?