

Sustainable Development by Encouraging Foreign Direct Investment in the Developing Economy to Protect the Biodiversity

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Abstract

Indian philosophy is the ray to the world for its transformation. Our great father of the nation who taught the lesson of peace and non violence and the power of civil disobedience to the whole world was certainly not his own idea but he learnt it from the various Hindu scriptures. Indian Philosophy also taught the concept of “Universe is one family”. If we want to bring change in the world then we should first change ourselves, our economic policies, and our social structure and transform the traditional knowledge to bring innovations. The equitable benefit sharing for the research done on the biodiversity includes the FDI but it is not compulsory for the foreign investor to always agree for FDI. It has other option to give benefit to the government. However, the question here is when our biodiversity and traditional knowledge of our indigenous people are being used for research, then why should we be in a compromising position. We have adopted the critical method to pen down the various issues and challenges with regards to biodiversity and FDI. This article gives you insight to readers and the environmental thinkers to appreciate the new thought to make transformation more sustainable.

Keywords: Biodiversity, Foreign Direct Investment, Benefit sharing, Traditional Knowledge, Value addition.

1. Introduction

“Biodiversity is life. Biodiversity is our life”. Living creator gets its life, profess and perish in environment. Thought of the isolated existence of human being can never be possible. The dependence of human beings on biological diversity is undoubted, as evident in everyday life. Biodiversity performs two most important functions. Firstly, it regulates and maintains the stability of climate, water regime, soil fertility and quality of air and overall health of the life support systems on earth. Secondly, biodiversity is the source from which human race derives food, fodder, fuel, fibre, shelter, medicine and raw material for meeting his other multifarious needs and industrial goods required for the ever changing and ever increasing needs and aspirations. Biodiversity is thus the central dogma of this live planet and it shoulders and catalyses the transformation of human civilization. India has rich tradition of conserving nature and natural resources. The concept of “Basudheiba Kutumbakam” (The whole world is one family) does not only talk about the harmony among the human being but also the mother nature and biodiversity whose harmony renders a proper condition to prosper. Worship of trees, forests, rivers, ponds, mountains and association of animals and birds with gods and goddesses had contributed immensely to their conservation during historic past. This calls for a concerted effort towards scientific research, education and policy back up so as to conserve the extant biodiversity while ensuring economic and ecological security. Biodiversity is a critical element in the region’s potential economic and social development. India is one of the 12 mega biodiversity countries of the world and one among the 194 signatories to the Convention on Biological Diversity (CBD) at Earth Summit in Rio de Janeiro in 1992. Its biological and genetic diversity has been extensively documented and is widely recognized. It is estimated that India has approximately 45,000 species of plants representing as much as 11% of the world’s flora. This includes about 17500 species of flowering plants, 48 species of gymnosperms, 1200 species of pteridophytes, 1980 species of mosses, 845 species of liverworts, 6500 species of algae, 2050 species of lichens, 14,500 species of fungi and 850 species of bacteria. Increase in human population, results into expansion of agriculture, industry, urbanization, and various developmental projects such as highways, mining, dams, which facilitate habitat destruction, fragmentation, degradation and leads to tarnish biological resources.

2. International Legal framework

In jurisprudence of benefit sharing, international agreements played an important role in realization of importance of benefit sharing of biological resources and provide basic standard. Biological resources and their exploitation are at the centre of global attention. Before turning to the legislative instruments used by India in implementing its international commitments in the field of biological resources, it is necessary to highlight first the main international legal instruments relevant in this field. The biodiversity conservation is in theory the main treaty dealing with the conservation and management of biodiversity.

The Convention on Biological Diversity (CBD) was adopted by the United Nations Conference on Environment and Development, held at Rio de Janeiro in June 1992 is one of the most comprehensive international treaties in the history of humanity as it deals with the infinitely complex but fragile world biological diversity of life on

earth. The inter disciplinary study of the concept of benefits sharing, traditional knowledge and intellectual property is the result of this convention.

The objectives of the CBD are ‘the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding. The Convention reaffirmed that states have sovereign rights over their biological resources as defined under article two and states are responsible for conserving these resources and using the same in a sustainable manner. The contracting parties to the CBD are, therefore, required to integrate considerations of conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. It includes a commitment to develop national strategies, plans or programs for the conservation and sustainable use of biological diversity. The biodiversity convention also provides a general legal framework regulating access to biological resources and the sharing of benefits arising from their use. It attempts to provide a framework that respects donor countries sovereign rights over their biological and genetic resources while facilitating access to those resources for users. It therefore requires member states to provide access on “mutually agreed terms” and is subject to the “prior informed consent” of the Country or Origin of those resources.

The idea of benefit sharing from the utilization of biological resources arises in the context of the third objective of the CBD, found in Article 1; “the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding”. However this objective must be read with those provisions of the CBD that enable the Contracting Parties, nations, to take control over the same genetic resources.

Benefit-sharing as a conceived under the convention and the related “Bonn Guidelines on Access to Genetic Resources and fair and equitable sharing of the benefits arising out of their utilization” can take the form of monetary benefits or non-monetary benefits such as sharing the results of research and development; collaboration, cooperation and contribution in scientific research and developments programs. Participation in product development and access to scientific information relevant to the conservation and sustainable use of biological diversity.

Under this Convention acknowledges the relevance of intellectual property rights but requires member to ensure that intellectual property rights support the convention’s objectives. Developing nations like India and undeveloped nations like Nepal had high expectations of CBD under the premise that, biological resources being the raw material for the biotechnology, seed and pharmaceutical industries, are the key to potential economic success in the future.

3. FDI and the Prospective Indian Economy

The flow of FDI can be compared with the flow of water. The water flows from higher place to lower. FDI also flow from the higher market to lower. The stagnation of markets in the developed countries leads to the investment in the new markets. Profit from the market depends upon the demand. When the demand is less compare to the inflow of the product to market then it leads to the negative effect of development in the market. However, at the same time reduction of the production in the manufacturing unit resulted the check in the capital investment, which again give raise the low growth rate. Hence, the investors as well as the companies look for the new market to exploit. Then the concept of FDI comes into picture. It is the result of liberalization in the global market, which allows the direct investment of the foreign capital in the domestic market. Now in an open market era, FDI is not only the need of the investor but also the developing countries are also showing keen interest in it. In similar vein, that the greatest technological spillovers from FDI occur when the technological gap between local and foreign enterprises is not very large, and crowding in of FDI and technology transfer is more likely the higher the level of human capital.

Economic policymakers in most countries go out of their way to attract foreign direct investment (FDI). A high level of FDI inflows is an affirmation of the economic policies that the policymakers have been implementing as well as a stamp of approval of the future economic health of that particular country. There is clearly an intense global competition for FDI. India, for its part, has set up the “India Brand Equity Foundation” to try to attract that elusive FDI dollar.

According to UNCTAD (2007), India has emerged as the second most attractive destination for FDI after China and ahead of the US, Russia and Brazil. While India has experienced a marked rise in FDI inflows in the last few years (doubling from an average of US\$5-6 billion the previous three years to around US\$ 19 billion in 2006-07), it still receives far less FDI flows than China or much smaller economies in Asia like Hong Kong and Singapore was ahead of India. Not surprisingly India’s growth strategy has depended predominantly on domestic enterprises and domestic demand as opposed to FDI and export demand. For instance, India’s FDI as a share of

GDP in 2007 represented only about 1.7 percent compared to 2.8 percent in China and even below Pakistan, and its share of gross fixed investment is 5.2 percent compared to 7.0 in China and 16.7 percent in Pakistan. However the cumulative FDI flows into India from April 2000 to January 2012 is approx US\$ 243,055 million. Thus FDI has been a relatively limited source of external financing and reserve buildup in India.

There is no enigma in today's global economy, about the role of FDI to a country economic growth. It is certainly a difficult task to separate and quantify the complex package of resources that FDI confer to the host country. There have been numerous researches to determine the nexus between FDI and growth. Nevertheless, studies have found an affirmative channel between FDI and growth, though FDI appears less positive in least developed economies, suggesting the existence of "threshold level of development".

In addition, the FDI and growth studies are open to a number of criticisms. For instance, an important critique has to do with causality: Does FDI lead to greater productivity and overall economic growth, or are these prerequisites for attracting FDI? It has recently emphasized that since the contribution of FDI to domestic capital formation is quite small, growth-led FDI is more likely than FDI-led growth. This is so, as increased economic activity expands the market size, offering greater opportunities for foreign investors to reap economies of scale in a large market economy like India. But in the epilogue we must not be ignorant about the industrial abduction in India has had a unidirectional positive Granger-causal impact on inward FDI flows (both approval and actual), thus inferring that economic activity is an important determinant of attracting FDI inflows in India, and not vice-versa. Similar questions regarding causality between market size/growth and magnitude of FDI inflows hold in the case of China.

These important caveats notwithstanding, it is almost universally acknowledged that FDI inflows offer significant potential benefits to an economy in ways that are not readily obvious in the data. The UNCTAD (1999) notes that transnational corporations (TNCs) can complement local development efforts by: (a) increasing financial resources for development; (b) boosting export competitiveness; (c) generating employment and strengthening the skills base; (d) protecting the environment and social responsibility; and (e) enhancing technological capabilities (transfer, diffusion and generation of technology). Technology transfer operates via four related channels: (i) vertical (backward and forward) linkages with suppliers or purchasers in the host countries; (ii) horizontal linkages with competing or complementary companies in the same industry; (iii) migration skilled labour; and (iv) the internationalization of R&D.

4. FDI and Biodiversity Protection: An Analysis

The study of environment can be done in either of the ways, eco centric and anthropocentric. The former one includes the human being with the biodiversity and latter keep the human being outside the purview of the biodiversity. The eco centric study treats human being equally with the other living creator on the earth. This type of study is considered as primitive and bizarre to the present situation. If we consider the second one than, the nomenclature of study suggests that the human being is not outside the purview of biodiversity but also put him in the center of the biodiversity. This type of study based on the assessment of the impact of the biodiversity on the human being. This study says that human is unequal with other living creator and this environment is for the nurture and growth of the human being. Hence, the human is only creator on the earth who can claim the right to environment.

If environment is a right of the human being, then it is somewhere the responsibility of the state to protect it. In our country, there are various judicial pronouncements, which held that right to environment is a fundamental right u/a-21 of the Constitution. Therefore, in India it is a prime concern for the state to ensure a good environment. As biodiversity is part of the environment, it should be protected. Now we have FDI, which can protect biodiversity. It seems bizarre but it is a good way out in this era when we are talking about the sustainable development. When we say the present biodiversity has great economic potential, everyone must realize the same and the government should take the steps to aware the common people about the benefit of biodiversity conservation.

It is well known that FDI can complement local development efforts in a number of ways, including boosting export competitiveness; generating employment and strengthening the skills base; enhancing technological capabilities (transfer, diffusion and generation of technology); and increasing financial resources for development. It can also help plug a country in the international trading system as well as promote a more competitive business environment. In view of this, India should continue to take steps to ensure an enabling business environment to improve India's attractiveness as an investment destination and a global manufacturing hub. The investment climate in India has undoubtedly become friendlier and investing in India is a much more attractive proposition today than in yesterday.

In a developing country like India domestic resources means its rich biodiversity and the traditional knowledge of the indigenous people. FDI gives an opportunity to maximum utilization of both the things in the domestic level. FDI which, results the industrial establishment in the local area, expands the scope of value addition. Value addition is the interim process between the inflows of raw material to the packaging of the product. Primarily it

needs work force, which is mainly based on the competent human resource apart from the machineries. This demand of competent human resource pressurizes the government for the human endowment. Government becomes bound to implement policies in furtherance of that like the vocational training to the indigenous people, which is related to their traditional knowledge itself. It creates many job opportunities for the illiterate poor village population. The process of value addition also needs huge amount of capital investment, and the government can impose tax on it and utilize that on the welfare activities. Furthermore, it helps in the infrastructure development in the root level for the better result, which ultimately gives benefit to the common people. Starting from the education to employment, infrastructure development to value addition, awareness of ignoramus to the development FDI will play an important role.

Traditional knowledge is the practice of the indigenous people for the preparation of primary products like weapon, vehicle, seed preservation techniques, medicines, agriculture techniques etc. most of the modern inventions are based on the traditional knowledge. In this way, invention is the advancement of traditional knowledge, which is unveiled to the outside world. The invention might have satisfied the requirement of the Patent law, but somehow the basis lies on the common practice of the illiterate people. In this way the illiterate people is getting nothing out of the invention by the application of modern technologies.

5. Conclusion

In the era when we are thinking of strengthening the IP regime of the country, the legislative apathy results gross violation of the IP right of the indigenous people. Again, it is not only the fault of the legislatures, the indigenous people is unaware of their rights and they don't have any scope for utilizing their intellect to gain any type of monetary benefit. Therefore, we need a comprehensive scheme for it.

Moreover, now the time has come when India can enhance more monopoly over its biodiversity. As India has a FDI friendly market, it should now mandatorily impose the FDI in the unexploited areas like biodiversity. If we see the legislation like Biodiversity Act 2002, which recognize the sovereignty of state on its biodiversity, the provisions relating to equitable benefit sharing for the research done on the biodiversity includes the FDI but it is not compulsory for the foreign investor to always agree for FDI. It has other option to give benefit to the government. However, the question here is when our biodiversity and traditional knowledge of our indigenous people are being used for research, then why should we be in a compromising position. Equitable sharing of benefits under Biodiversity act is a mockery in the present situation, when we are in the better side. When the IT sector is stagnant, bio-pharmaceutical industry is at the peak, the next potential market would be the biodiversity. Hence, the government should show more concern about the issue so that our country can play a crucial role in the world economy.

References

1. Aananda Mohan Bhattarai (2010), *Protection of Himalayan Biodiversity: International Environmental Law and a regional Legal Framework*, Sage Publication, New Delhi
2. Ajay Kumar Tamar, Shobha Jain,(2012), *FDI in India*, 1st Edition, Kunal Books, New Delhi
3. Armin Rosencranz, Shyam Divan (2007), *Environmental Law and Policy in India*, Oxford University Press, New Delhi
4. Asiedu, E, (2002), *On the Determinants of Foreign Direct Investment to Developing countries; Is Africa Different?*, World Development. Vol 30, pg 107-109
5. Basu Sharma and Azmat Gani, (2004), *The Effects of Foreign Direct Investment on Human Development*, Global Economy Journal, Vol 4, Issue 2
6. Bo Sodersten, Geoffrey Reed (2005), *International Economics*, Macmillan Press limited London.
7. Charles Mcmanis (2007), *Biodiversity and the Law: Intellectual Property, Biotechnology and Traditional Knowledge*, Earthscan Ltd, London
8. Chiaku Chukwuogor Ndu (2003), *Recent trends in global FDI flows: Implication for the 21st century*, International Journal of Banking and Finance, Vol , Issue 2
9. Gopal Krishnan, K.C. (2005), *Legal Economics (International Dimension of Economics and Law)*, 1st Edition, Eastern Book Company, Lucknow
10. Grandstrand, Ove, (1999), *The Economics and Management of Intellectual Property: Towards Intellectual Capitalism*, 1st Edition, Edward Elgar Publication
11. Jonathan Curci (2010), *Protection of Biodiversity and Traditional Knowledge in International Law of Intellectual Property*, Cambridge University Press, New Delhi
12. Joseph Copper (2005), *Agriculture Biodiversity & Biotechnology in economic development*, Springer Publication, New York
13. K.D. Prathapan and Priyadarsanam Dharma Ranjan (2011), *Biodiversity access and benefit-sharing: weaving a rope of sand*, Current Science. Vol. 100, No.3.
14. P Pushpangadan and K Narayanan Nair (2005), *Value Addition and Commercialization of Biodiversity*

- and Associated Traditional Knowledge in the Context of the Intellectual Property Regime*”, Journal of Intellectual Property Rights, Vol 10, pp 441-453.
15. Philippe Cullet and Jawahar Raja (2004), *“Intellectual Property Rights and Biodiversity Management: The Case of India”*, Global Environmental Politics.
 16. Pratibha Branhmi, R.P. Dua and B.S. Dhillon (2004), *“The Biological Diversity Act of India and agro-biodiversity management”*, Current Science, Vol, 86, No. 5.
 17. Segger, Marie, Claire (2011), *“Sustainable development in world investments Law”*, 1st Edition, Kluwer Law International, Netherland
 18. Taxmann’s,(2012), *“Guide to FDI in India: with FDI Policy*, Taman Publication Pvt Ltd.
 19. Taxmann’s *Guide to Foreign Direct Investments in India: With FDI policy* effective from 1st April, 2011, Taman Publication Pvt Ltd
 20. Thomas, Jones, et-all, (2007), *“Environmental Economics”*, 1st Edition, Thomson South- Western Publication, Australia.
 21. Various International reports and documents, including the World conservation Strategy (1980), the ASEAN convention (1985), the Brundtland commission’s Our common Future (1987), caring for the Earth (1991) and the Global Biodiversity Strategy (1992).
 22. Venkataraman (2009), *“India’s Biodiversity Act 2002 and its role in conservation”*, International Society for Tropical Ecology; Vol 50(1), Page 23-30.
 23. UNCTAD (2000), World Investment Report, Geneva.

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