ENVIRONMENTAL AND SOCIAL ASPECTS IN PROJECTS: A BOOST TOWARDS SUSTAINABLE MARKETING

Kamal Kishore, Apeejay School of Management, Delhi Silky Vigg Kushwah, New Delhi Institute of Management, Delhi

ABSTRACT

Projects are set up in nations for economic growth and it requires long term finance for their completion. Different types of lending institutions are in existence in all countries to extend financial assistance to projects. These projects belong to different industrial and infrastructure types. Financing institutions carry out comprehensive techno economic evaluation before considering grant of financial resources. Besides techno economic aspects, in current scenario, environmental issues have also been featured by institutions in their appraisal process. Social aspects have also come into consideration as both these have been found to be of serious concern from sustainability angle. Project lending institutions apply various techniques for examining impact of environmental and social issue in project sustainability. Sustainable projects are also important from the perspective of sustainable marketing. It is true that countries are looking for sustainable projects, those sustainable projects can also improve the world-of-mouth marketing of the project owners and the overall market efficiency will increase. If the environmental and social aspects of the projects will be addressed properly, it will lead to reduction in cost and help in achieving economies of scale too. The reduction in cost and economies of scale are important from the perspective of sustainable marketing.

Keywords: Sustainable Marketing, Environmental Risks, Project Finance, Project Evaluation, Social Factors, Sustainability.

INTRODUCTION

"Sustainability is now increasingly recognized as central to the growth of emerging market economies. For the private sector, this represents both a demand for greater social and enviro-Mental responsibility as well as a new landscape of business opportunity" (IFC-BS, 2007). Project financing, both for industrial and infrastructure projects, plays a critical role in economic development of country. Availability of long term finance for projects, therefore, plays a vital role. Both equity and debt components of finance are used in proper leverage for implementation of projects. While equity is provided by promoters and retail or large investors, debt or project loan is availed from different categories of banks and financial institutions. Project lenders may also take share in equity component as direct subscription or by way of underwriting of equity. Merchant bankers, Investment bankers and private equity players do lend their hand in equity of a project – new or expansion project. Risk capital or venture capitalists add to the list of equity investors. Commercial banks in most countries are major source of project loans. Development banks and specialized financial institutions exist in many countries as sources of project loan.

Many nations have universal banks that cater to all type of financial needs of projects in the forms of equity, debt, working capital etc EP (2020).

Project loan being big ticket amount, project financing institutions carry out detailed techno economic evaluation. Such exercise include evaluation of all aspects like technical, managerial, commercial, legal, security, financial, costing etc. In addition to all these areas, one aspect which is gaining currency for quite some time is evaluation of environmental aspects in project appraisal. Environmental aspects are related to sustainability angle and project financers are taking keen interest in this regard so that the project implementation does not suffer on this account. This paper examines the issues related to environmental management in projects and their nuances.

Project Finance Evaluation

Project finance evaluation involves many different aspects. A brief description of these areas in relation to project appraisal is given below:

Technical Appraisal – examination of land, building, plant and machinery, technical process, technical collaboration, product quality, training of personnel etc

Managerial Appraisal - competency of management in implementation of project, financial soundness, integrity, Board of Directors and senior management, governance.

Commercial Appraisal – product quality, demand and supply, competition, pricing, sales and distribution network.

Legal Appraisal- Constitution of borrower, borrowing powers, Memorandum and Articles of Association, title of land, security issues, legal documents.

Financial Appraisal – Cost of project, means of finance, promoter contribution, financial ratios, profitability projections, repayment capacity.

Environmental Appraisal- environmental issues have now come on center stage and include impact of project on environment, society, their redressal etc. These will be dealt in detail in following paragraphs.

Sustainable Marketing through Sustainable Projects

If the environmental and social aspects of the projects can be addressed properly than is can also improve the sustainable marketing practices of the firm. The key component of the sustainable marketing is that it should be consumer oriented, innovative and carry a prospective for societal concerns. The addressing of various environmental and social aspects will make projects for consumer oriented because the organizations are thinking about the customers. Customers are the important stakeholder in the business. In past few years, the role of managers is not only to think about the profit making for their organizations. From the stakeholders' point of view, they should also improve the sustainable performance of the business. By improving the environmental and societal concerns of the projects, the overall market efficiency will improve because their will positive words to mouth will float in the market. It will improve the reputation of the companies among the customers and among the other stakeholders as well. Now-days, the customers are becoming smart customers. They understood what type of projects an organization

2

is investing in. If the organization is investing in environmentally and socially sustainable projects, the indirect message will float to the customers. By investing in sustainable projects, the overall image of the organization will improve. The positive image building is very important from the perspective of sustainable marketing.

Environmental Appraisal and Sustainability

Sustainable development requires conservation of resources for future generations. Therefore, in addition to normal aspects of technical, legal, commercial, financial, project lenders have of late been showing serious concern for environmental aspects. They have realized from past experience that if these aspects are not addressed in the beginning, it may lead to huge risk for the project. In some cases, projects may reach point of no return and cause significant losses to lenders. A project may entail intended or unintended consequences which if not anticipated before the start, may cause serious concerns including financial and non-financial risks. Project lenders cannot afford to ignore these aspects which have become more critical these days. International institutions, therefore, bestow serious attention to environmental issues relating to projects.

Some examples may illustrate it better. A copper project in Goa faced serious claims from neighboring community alleging that emission levels from the project were hazardous to them. Strong protests followed against the project and a stay order was granted against the operations of the project. The project had obtained necessary technical approvals including emission benchmarks. It took 5-6 years for the management to get the stay vacated after protracted battle at various levels of judiciary. This resulted in severe increase in the cost of project entailing from interest burden in the intervening period. The project became financially unviable. What is the lesson? If the promoters or management had been sensitive to the apprehensions of neighboring people, they should have interacted with them and explained about the environmental approvals in place including benign levels of emission. Discussions should have been held at various levels of the population. The project could have started some community services around the area to demonstrate its affinity for them.

The project lenders suffered heavily. Their appraisal of project from technical and financial angle was not faulty but it ignored the community reaction to an environmentally sensitive project. It translated to huge financial risk and rehabilitation seemed bleak. This shows the extent of impact on a project if environmental issues are not taken seriously.

Review of Literature

World Council for Economic Development began with a widely acceptable definition providing. Sustainable development might be defined as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs", Sustainable banking is decision by banks to products and services only to customers who take into consideration the environmental and social impact of their activities (Bouma et al, 2001); Brundtland (1987); Chandran, et al. (2013). International Finance Corporation, an arm of the World Bank while dealing with business case for sustainability observed that Companies are capitalizing on local conditions and shaping their business strategies to accommodate constraints on natural resources in a way that allows them to develop innovative new products, services, and business models. This also provides opportunities to bolster their growth, profitability, and add societal value (IFC, 2018).

Sustainability issue deeply impacts projects as they operate in the society and environment and lenders have of late been quite conscious of these aspects at evaluation of financial loans to projects. Project Financing Institutions (PFIs) have evolved for this purpose an Environmental and Social Management System (ESMS) which is "consisting of procedures, management commitment, delineation of roles and responsibilities and guidance that a bank/PE fund follows to review and manage the E&S issues and risks associated with its investments" (ESMs, 2019). "Project finance may result in unsustainable practices because banks and project sponsors (bank clients) often do not carry out adequate environmental and social impact assessments of the projects they are financing" (EIRIS, 2006). Project financing institutions are getting sensitive to environmental and social risks associated with projects. "The role of project financing in enhancing or undermining sustainable development has come under increased scrutiny in recent years (Lawrence and Thomas, 2004). IFC has pointed out that "Leading international financial institutions are setting higher standards. IFC was one of the first multilateral finance institutions to commit to high standards for managing social and environmental risk in its private sector investments (IFC - BS, 2007). There is strong business case for sustainable banking. There is growing evidence that innovative approaches to sustainability can bring substantial benefits to bank's overall business performance (IFC - BS, 2007).

The Environmental Impact Assessment is a key document for examining environmental risks and "factors determining quality of these reports are legislations, quality of consultant groups and their expertise, scoping, extent of land use change coverage of EIA reports, public response and nature of projects". The appraisal of environmentally sensitive projects should address several issues: the political dimension of natural-resource projects, the measurement of environmental impacts, and the use of cost-benefit and multi-criteria appraisal techniques (Pelt and Ann, 1994).

Objective of Study

The study is aimed at understanding of environmental sustainability issues in project financing with specific illustrations, risks involved in it and need for these institutions to appreciate various nuances and take remedial measures in a timely manner. The paper has been based on exploratory interaction with number of projects which faced environmental issues effecting project lenders.

What Environmental Appraisal Entails

The impact of environment on a project depends on its size, nature, technology used, location etc. Project financing institutions generally examine following aspects:

- (i) Assessment of impact of project on various aspects of environment, viz. humans, plants, air, animals, water, ecology etc.
- (ii) Whether impact is within permissible levels,
- (iii) Taking approval of various environmental agencies
- (iv) Compliance of environmental laws

In this context, the promoters or management of Project Company are expected to take following action:

 Consider all environmental consequences at the planning stage and take remedial action where so required, (ii) Reactions of local population are also to be studied, otherwise it may lead to considerable delays and costs.

In fact, thanks to spate of non-Governmental organizations (NGOs) grown in the country, public awareness to environmental issues has considerably increased of late and this has put extra pressure on both promoters and financial institutions. Both are concerned to identify impact of project on surrounding areas (noxious gases, fly ash blowing out, inundation of area etc.) and mitigate the effect. They realize that any environmental adversity may lead to closure of the project. At the same time, they know that being clean company boosts image of company and increases brand name.

Financial Impact due to Environmental Adversity

Environmental risks pose significant financial risks to lenders in following forms:

1. Uncertainty of cash flows:

Project cash flows are life and blood for project lenders. The real security for project loans is not mortgaged property but sustainable cash flows adequate to service both debt and equity. The net cash flows depend on Debt- Equity leverage used in financing mix and debt service coverage ratio. The loan installments and interest burden drive the ratio in conjunction with available cash flows.

Besides normal business risks in projects, any disruption in cash flows arising out of environmental causes pose great uncertainty in project viability. Several examples testify the environmental dangers causing severe setback in project which may ultimately lead to closure of the project. A well-known refinery near sea in Gujrat was devastated by a cyclone, leading to closure of project causing massive losses to project lenders. The rehabilitation of project entailed enormous escalation in cost and sufferings to lenders. The failure on the part of promoters and lenders in foreseeing such huge environmental risk proved very costly.

A renowned steel project in Jharkhand did not meet with environmental prescriptions and was shelved. A hydel power project in Madhya Pradesh had the potential of inundating several neighboring villages who started a campaign to stall the project. Though lenders provided for a sizable relief and rehabilitation expenditure in project cost, the villagers were suspect about it and wanted only stoppage of the project. Lenders here also failed to visualize the environmental angle and faced severe financial losses. The ash flying out of a thermal power unit near Delhi became a cause of serious concern for public in south Delhi. The problem was quickly attended and public fury was averted.

2. Active Non-Governmental Organizations (NGOs) and Civil Society

Of late the NGOs and civil society organizations have become hyperactive in respect of projects likely to impact the population. This impact may arise from pollution, emission of toxic gases or other material, liquid spills, use of unhealthy raw material, pipeline bursts, impact on animals, birds and plants etc. The response of these organizations has been so severe in many cases that projects were closed. The crowds have been incited to attack the plants, set employment squeeze, cause road blockages, power line sabotage, mob violence, demonstration before civil authorities etc. All these are common place due to increased information levels with NGOs. Even local authorities have shown reluctance to interfere in a serious way for political and other reasons. As a result, the project have suffered severely and entailing huge losses to themselves and lenders. The project cash flows are drastically effected due to such movements and project suffers. The reputation of commercial banks has suffered through high-profile campaigns by various NGOs, which name and shame banks for financing polluting companies and contributing to environmental harm (Coulson, 2007).

All this arise due to failure of promoters and lenders to visualize in advance the reaction of society to environmental aspects of project. A prior consultation with society explaining the environmental clearances and allaying any apprehensions will prove to be useful. A regular dialogue with concerned society members is also a good step. In a foreign metal project in tribal area, the tribal representatives were inducted on the board of directors and some other committees to alleviate all doubts and grievances due to environmental issues.

3. Disruption of Project

The project operations can be brought to standstill due to failure to comply with environmental issues. State authorities may take drastic action, including closure if environmental approvals are not in place or are defective. On the other hand, NGOs or other civil society organizations may start movement against the

project or take court injunction against continuing operations of the unit. As mentioned earlier in the paper, a project in Goa was inflicted a closure of operations by the court leading to suspension of operations for years which caused huge losses to all stakeholders. This again lends to a learning that environmental aspects need to be given adequate attention in all respects at the planning stage both by promoters and lenders to avoid troubles later. The closure of operations of a project is a serious issue as it causes drying up of cash flows for indefinite time. The grant of injunction by courts must be contested to get the injunction vacated expeditiously.

4. Fines, Penalties, Law Suits

In many cases, projects have been found to be complacent in meeting environmental compliances and imposed fines, penalties and law suits. This imposition too negatively impacts cash flow. At times, fines may be so severe that it may cause serious dilution in cash flows for project operations. The project also faces reputational risk in such cases besides strain on management in terms of effort, time and energy. Any depletion in cash flows effects debt servicing capacity of projects and is a serious setback to all concerned parties. The project management therefore should be fully conscious in taking all measures to prevent such avoidable cash losses.

5. Impaired Value of Security

The market value of security charged to project lenders serves as a support to recover loans in case of freezing the cash flows for environmental failures. At times, even project could be abandoned if it becomes impossible to comply with severe environmental conditions. Lenders' only recourse remains to be sale of mortgaged assets and square off loans from realizable value of security. In such cases, however, distress sale has to be done and realizable value of assets is disproportionately less. The project's adverse condition becomes public knowledge leading to severe deterioration in value of available security.

International Aspect of Sustainability-Equator Principles

Project financing institutions (PFIs), are always aware that industrial projects, including infrastructure units, they finance are prone to huge environmental risk as many of them have the potential to impact human beings and other environmental creatures. Conscious of this aspect, they have included environmental assessment as part of their techno economic evaluation of project. Individual PFI in India have their own system and procedures for environmental assessment and risk mitigation on this account, before considering financing for such projects. Many of projects face rejection or given conditional lending if not found sound on environmental scrutiny. Internationally, the private financing arm of World Bank, International Finance Corporation (IFC), formulated a set of voluntary guidelines, known as Equator Principles (EPs), to be followed by PFIs. The principles, first initiated in 2003, were called Equator Principles I (or EP I), were revised in 2006, 2013 and latest version, EP 4 is applicable from October, 2020. As at present 126 projects financing institutions in 38 countries (EP, 2020) have voluntarily adopted Equator Principles and apply the same in environmental assessment of industrial and infrastructure projects. From India, so far only one institution, IDFC First Bank has adopted Equator Principles. These guidelines are basically applicable to project finance related products and services extended by PFIs, viz Project Finance, Corporate Loans, Bridge Finance and Advisory Services. These also apply to expansion, modernisation and diversification related needs of project finance. For project finance, loan amounts of US \$10 million or more are covered.

"The Equator Principles (EPs) is a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence and monitoring to support responsible risk decision-making" (IFC, 2018). They provide minimum standards to be followed for due diligence in environmental and social risk assessment. It is enjoined by these guidelines that EP adopting institutions will not provide loans to projects where borrower does

not comply with environmental and social policies. In other words, no loans will be extended unless borrower has completed Environmental Assessment to the satisfaction of lenders. As mentioned above, the EPs provide for robust public consultations as part of risk management and mitigation and seek to ensure that projects financed are developed in a manner that is socially responsible and reflect adequate environmental management policies. There is a clear message that projects with negative effect on environment and community are to be avoided for extending project loans and other services. It requires that an eenvironmental and social assessment has to be carried out by independent consultants. Assessment has also to include measures to prevent, mitigate and manage adverse impacts of project. There is mechanism to ensure compliance through loan agreements where covenants are to be built for implementation of lenders requirements on environmental and social issues and failure would entail loan recall with all attendant consequences. Borrower has to prepare an Environment Management Plan and lender to ensure its implementation – to mitigate and manage adverse environmental impact.

Banks and Financial Institutions in India, engaged in providing project financing related products, have also formulated their own guidelines for assessing environment related aspects in its risk management and integrated the same in their overall project evaluation norms. These guidelines include besides all environmental related approvals from concerned authorities, examination of impact of project on different environmental factors, including human beings, plans, birds, animals, water, pollution and also involve long term societal aspects. They realize that society is very sensitive to environmental issues which have been further accentuated by Non –Governmental Organizations and civil society movements and that any failure on this account may imperil the project assistance seriously causing significant financial impact. In large projects, this impact may have the potential to ruin the accounting balance sheet of the financial institution.

Environmental Issue in India and the Government

The environmental issues in India are looked after by the Ministry of Environment, Forest and Climate Change of the Government of India, which have issued elaborate instructions in this regard. A number of laws relating to environmental protection have been in vogue in India and projects are mandated to ensure compliance thereof failing which project lenders will not consider them for financing. Major laws are Environmental Protection Act, 1986, Environmental Protection Rules, 1986, Water (Protection and Control of Pollution) Act, 1971, Air (Protection and Control of Pollution) Act, 1981 etc.

The Ministry has provided an online window (named PARIVESH) for submission and monitoring of project proposals for seeking environmental, forest, and wildlife clearances from various authorities at central and state level. For the purpose of Environment Impact Assessment of projects, the "environment mainly focuses, but is not limited to physical, chemical, biological, geological, social, economic, and aesthetic dimensions along with their complex interactions, which affects individuals, communities and ultimately determines their forms, character, relationship, and survival. In EIA context, 'effect' and 'impact' can often be used interchangeably. However, 'impact' is considered as a value judgment of the significance of an effect' (MOEF, 2019). Ministry has also issued standard terms of reference for environmental clearances.

Project financing institutions, while examining Environment Impact Assessment (EIA) reports submitted by project promoters have to understand it in its various nuances and take a conscious view of environmental risk and its management. The capability of project management

in implementing the report in all aspects has to be judged meticulously. This requires lending institutions to build enough internal competence in assessment of environmental aspects projected in the report and its long term effect on project sustainability. The risk involved and their management is key area that requires adequate attention and capability of project appraisal officers. Well known cases of construction project in Lavasa, a large steel project in Orissa, a Hydel project near Indore, and other aluminium units are living example of improper handling of environmental risk management. Here, as a good example, the case of a large mining project in Canada can be cited where environmental issues were so meticulously managed that it did not lead to any hassles on this count. Besides educating the neighbouring tribal population on environmental issues and measures taken by company in managing them, assurance not to disturb the rich cultural and social fabric of area, they included local persons on the Management board. A continuous and robust public dialogue was an essential part of risk management and senior executives paid considerable credible attention to it. Company also engaged environmental experts for guidance and appointed officials for managing community relations with gusto. A strong feedback system was developed and acted upon. The results achieved were such that it established overall success of project for long term and led to its sustainability in real sense. It shows that company was very conscious of environmental issues, it not only handled legal compliance but also environmental issues responsibly.

Conclusion

Sustainability of project finance is key issue for survival of project financing institutions. It includes not only a competent techno financial evaluation but cannot ignore by any means environmental aspects. The risk inherent in ignorance of environmental management can entail a huge setback for both promoter and lender as it can lead to closure of project or serious disruption in cash flows. Failure to comply environmental laws and mitigate environmental damage may prove to be expansive. Project lenders have recourse mainly to project cash flows and it faces huge risk for its inability to foresee environmental hindrances and incompetent appraisal of risk emanating therefrom. Project appraisal officials have to be trained to develop significant capabilities in evaluating environmental aspects and associated risks and their long term impact on project cash flows and overall survival of the project. Banks must significantly improve their knowledge and awareness of environmental and social risks associated with project financing and develop strategies to mitigate and manage them effectively. They should clearly realize that examining environmental and social risks adequately will reduce their overall financial risk also. Comprehensive training of project financing officials on ESA aspects and conduct of environmental and social audit by companies are essential measures to adopt. They have to be more proactive in this regard and integrate their systems with best international practices. This will add to their own cost benefit ratio and will give increasing global recognition and integration. Increased stakeholder engagement on a continuous basis has to be an active part of it. If they learn to understand environmental risks, sustainable development offers significant opportunities to project lenders.

REFERENCES

Bouma, J.J., Marcel, J., & Leon, K. (2001). Sustainable Banking: The Greening of Finance. Sheffield, UK: Greenleaf Publishing.

Brundtland, G.H. (1987). Our common future Oxford University Press. New York.

Chandran, M.V., Aregai, M., Reddy, T.B. (2013). Environmental appraisal - Indian scenario. *International journal of Engineering and Management sciences*. 4(2), 218-222.

Coulson, A.B. (2009). How should banks govern the environment? Challenging the construction of action versus veto. *Business Strategy and the Environment*, 18(3), 149-161.

EIRIS. (2006). Project Finance: A Sustainable Future. Ethical Investment Research Services. July, 2006.

EP, (2020). Equator Principles.

ESMS. (2019). ESMS for FIs: A Primer, 2019.

IFC, (2018). Business case for Sustainability. IFC, Washington, USA. Report.

IFC-BS, (2007). International Finance Corporation. Banking on Sustainability.

Lawrence, R.F. and Thomas, W.L. (2004). The Equator Principles and Project Finance: Sustainability in Practice. *Natural Resources and Environment*. 19(2) 20-26.

MOEF. (2019). Ministry of Environment, Forest and Climate Change. Government of India. http://moef.gov.in Van Pelt, M.J. (1994). Environment and project appraisal: lessons from two cases. The Annals of Regional Science, 28(1), 55-76.