Sri Lanka Banks' Association
Sustainable Banking Initiative

Case Study

Unmanaged Environmental and Social Risks are Credit Risks

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Introduction


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This case study focuses on the relationship between a client's failure to manage their pollution impact and credit risk. It presents three different businesses that were existing clients of the bank. One a chemical warehouse facility, one a small-scale metal plating company and the third a medium scale textile finishing company. The warehouse facility was seeking part financing to expand the facility, the metal plating company funding to build a new state of the art facility and the textile company financing for the installation of a new production line.

The cases also highlight the scope of potential environmental and social (E&S) risks to be considered and the importance of appraising all client operations and not just those associated with the project being financed. The E&S risk that results in a credit risk may not come from the project related transaction under consideration but from another part of the operation.

In all these cases the IFC Performance Standards No. 1: Assessment and Management of Environmental and Social Risks and Impacts, No 2: Labor and Working Conditions, No. 3: Resource Efficiency and Pollution Prevention and No. 4: Community Health, Safety, and Security provide a useful framework against which to assess a client's operations. In addition, there are sector E&S guidelines published by development banks and international sector initiatives that provide useful information on typical E&S impacts associated with a given sector and how to mitigate.

These good practice standards and guidelines should be perceived as robust frameworks for assessing a client's E&S performance and not as a hinderance to doing business.

All three cases clearly demonstrate that there is a strong business case for banks to strengthen their understanding of what their clients do and more specifically how well they manage their environmental and social impact noting that poor performing clients are a credit risk.

E&S Guidelines

WB Group EHS Guidelines

EBRD Toolkit and Sector Guidelines

The case is based on facts, but names have been changed for reasons of confidentiality.


Image: Pixabay

Hazardous Materials Management *– The client will avoid or minimise and control the release of hazardous materials. The transportation, handling, storage and use of hazardous materials shall be assessed.* ***IFC PS No* 3**

A client will avoid or minimise the potential for community exposure to hazardous materials and substances. Where there is a potential for the public to be exposed to hazards, the client will exercise special care to avoid or minimise their exposure. ***IFC PS No 4***

Emergency Preparedness and Response Systems *-to be established and maintained so that a client is prepared to respond to accidental or emergency situations.* ***IFC PS No 1 and 4***

Chemical Warehouse Expansion

Sri Chemicals is a limited liability company involved in the importation and trade of chemicals including pigments, inks, solvents, lubricants, oxidisers and bleaching agents for printing and paint manufacturing industries. It started from modest beginnings with a small warehouse in a mixed residential area. After experiencing early rapid growth, the company acquired adjoining blocks of land for expansion. It sought a medium term (6 years) loan of LKR 150 million (approximately US$1 million) to purchase the land and expand the warehouses. The warehouse property was taken as collateral.

Although the operation was near local residences the company obtained business registration and local authority approvals for a chemical warehousing and trading facility which in a short period of time ended up holding bulk quantities of chemicals. Chemical warehousing and trading are not prescribed activities requiring Environmental Protection Licenses under the National Environmental Act.

Whilst the facility did not require any environmental approvals the bank deemed the E&S risk profile high enough to warrant an E&S risk assessment as part of the credit appraisal for the loan application. The E&S risk assessment focused only on fire safety noting that the company had installed portable fire extinguishers and a hydrant system.

No attention was paid to safe storage and handling of chemicals such as availability of Safety Data Sheets (SDSs), labelling, safe quantities, safe distances between stocks with incompatible properties, aisle spaces, first aid, wash stations, emergency preparedness and response systems, worker health and safety systems. Furthermore, no consideration was given to assessing the potential community health and safety risk from the location of the operation and whether the existing facility and proposed expansion met safe hazardous warehouse design standards, including safe distances from other buildings and sensitive targets.

A Matter of Time

Although the bank had correctly flagged the operation as having high E&S risks the subsequent assessment failed to send a clear message through the credit appraisal process that the bank was exposed to a significant hazard. That is, a warehouse with large quantities of poorly stored and managed hazardous substances with a mix of toxic, flammable, combustible, and chemically reactive properties, in a residential area.

Sri Chemicals was no exception. In 2012 a fire broke out in the warehouse not only damaging a large portion of the chemical stocks and the warehousing infrastructure but also releasing a plume of toxic vapour across the neighbouring community. Over 50 residents were hospitalised with breathing difficulties and eye irritations. Fortunately, there were no fatalities.

Image: Pixabay

Hazardous Substances – are hazardous! Take a cautious approach. Seek specialist advice if you do not have inhouse experience.

Risk Exposure

The incident made the headlines of local newspapers and all local television news networks. The facility was closed for six months pending the outcome of court proceedings. The company was subsequently ordered to relocate to an industrial zone. Aside from lost business, while closed, Sri Chemicals also incurred costs associated with site clean-up (e.g. post fire residue disposal), site decontamination and warehouse relocation. Even after relocation the company continued to incur depressed revenues as customers black listed the company and moved to other suppliers.

The combined financial stresses significantly impacted the ability of the company to commit to its loan repayment schedule despite rescheduling more than once. The loan became a non-performing loan and the bank was left with damaged and contaminated property as collateral.

"The design of safe warehousing of hazardous chemicals is a complex task requiring a multi-disciplinary team.

It requires the identification and understanding of all the hazardous and harmful properties of the substances likely to enter and be stored in the warehouse, how they may interact with and effect each other and other entities such as activities on neighbouring properties, the environment and adjacent populations"
Amec Foster Wheeler, International Engineering Concern

Points of Reflection

1. The presentation of business approvals and licences is just one part of an E&S risk assessment. They cannot be taken as a guarantee that a client manages all their potential operational risks adequately.

2. The case clearly demonstrates the importance of having a system to flag medium and high E&S risk operations, independently of national environmental protection licence requirements. This establishment was displaying high E&S risk factors such as the inherent risk of bulk storage of hazardous substances coupled with the proximity to a sensitive location. Some prior research and reference to good practice guidelines for hazardous materials, such as the IFC PS No. 3: Resource Efficiency and Pollution Prevention and No. 4: Community Health, Safety, and Security, might have prompted the bank to look beyond fire safety issues.

   It would have also been prudent to recommend an expert opinion on a) the appropriateness of the location of the operation and b) the client's performance with respect to their storage and handling practices.

3. Relationship managers and credit risk teams need to be trained and empowered to know when to escalate a risk concern, when to allow time for further investigation and when to bring in external assistance.

   In this instance, the Bank's credit risk systems should have allowed the team responsible for the E&S risk assessment to send an immediate alert to decision makers based on observations from a very first site visit. Noting that the risk level is high, involves substances with properties that the bank is not expert in analysing and that has the potential to give rise to a serious incident and cause harm to residents located near the warehouse.

   A responsible credit appraisal system should allow an emerging scenario to be revisited to ensure the appropriate level of E&S risk analysis is being undertaken and whether more needs to be done; and to provide the necessary time and resources to answer the concerns identified.

   The outcome of a more in-depth E&S risk analysis may have resulted in a recommendation to engage with and support the client to relocate their operation rather than to finance an expansion at the existing site.

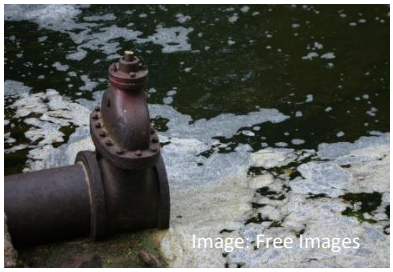
Additional Resources

The International Council of Chemical Associations Responsible Care Initiative is a voluntary commitment by the global chemical industry to drive continuous improvement and achieve excellence in environmental, health and safety and security performance. Through the site you can access the GPS Chemicals portal where 4,500 GPS Safety Summaries can be found.

In 2012 Sri Lanka joined the Responsible Care initiative.

https://www.icca-chem.org/responsible-care/

Metal Plating Plant



This case concerns a small-scale metal plating company, manufacturing zinc plated fasteners for the local market. The company had a built a reputation for high quality products and market demand was growing. To meet the demand the company approached the bank for a term loan of LKR 300 million (approximately US$2 million) to relocate the operation and expand production capacity. The intention was to continue operations at the old plant while the new plant was built. The new facility was expected to be completed within 12 – 18 months.

Metal plating operations have the potential for significant environmental and social impacts, such as surface and ground water pollution, air emission and occupational injuries and diseases, if not controlled and managed. In general, the E&S impacts and their mitigation measures are well understood and practiced. Due to the potential risk the bank undertook an environmental and social risk assessment to establish if the new facility included appropriate impact control and management measures.

It was established that the design of the new production facility had been done in accordance with good industry international practices and included pollution control systems for both wastewater and air emissions. The term loan was granted.

No E&S risk assessment was undertaken of the existing operation on the basis that the facility would be discontinued when the new facility was operational; or past E&S audits reviewed.

ESMS - *the client will establish and maintain an ESMS appropriate to the nature and scale of the project and commensurate with the level of its environmental and social risks and impacts. The ESMS will incorporate the following elements: (i) policy; (ii) identification of risks and impacts; (iii) management programs; (iv) organizational capacity and competency; (v) emergency preparedness and response; (vi) stakeholder engagement; and (vii) monitoring and review.* ***IFC PS 1***

Emergency Preparedness and Response Systems -*to be established and maintained so that a client is prepared to respond to accidental or emergency situations.* ***IFC PS No 1 and 4***

A Lot can Happen in a Year and a Half!

Two months before the new facility was due to commence operations the community neighbouring the existing facility lodged a complaint against the company under the Public Nuisance Act regarding a deterioration in the water quality in their dug wells. An investigation by a professional consulting body was ordered and effluent spills were deemed to be the source of the ground water contamination.

Normally the rinsing water and the spent acid/alkali baths were neutralised and then sent in gully bowsers to the closest sea

outfall for disposal. However, the company accepted that oversight by a newly recruited employee had resulted in partially treated spent acid being discharged directly on the ground.

The company was ordered to close the operation, clean up the contaminated ground water and fund a piped water supply for the community. Whilst the piped water connections were being established the company had to provide water from bowsers. It took the company three months of pumping, neutralising, and disposing at sea to clean the contaminated groundwater.

Image: Pixabay

Risk Exposure

Not only did the company incur heavy costs associated with the clean-up and provision of alternative water supplies to affected households, it also lost revenue for a period of eight months from the time of closure of the existing operation and the opening of the new facility the completion of which was delayed by six months.

The term loan instalments fell into arrears and the bank had to reschedule the loan and grant a grace period of two years until the new facility was running at full production.

Points of Reflection

1. Determining the scope of the E&S risk assessment is a critical step and needs to consider all client operations that the bank may be exposed to. In many cases it may not be restricted to the specific project requiring financing. Especially, when the project concerned is associated with an existing operation.

   With existing facilities that are rated medium to high E&S risk the most appropriate E&S risk assessment tool is an environmental and social audit or risk/hazard assessment. If a client operates responsibly, they are likely to have an environmental and social management systems (ESMS) in place. If these are being implemented well it is likely that the client will have recent E&S audit and performance review reports available to share with the bank.

And point to note ……..

Seeing how the existing facility is managed provides insights as to how the new facility might be managed and possible improvements to request!

2. This case also demonstrates the need to assess how well environmental controls and management practices have been integrated into the company's standard operating procedures and induction training. When new employees are hired, do they receive induction training and what does it cover? Does it include their responsibilities with respect to the management and control of environmental and social impacts associated with their work procedures?

   In this case the company failed to adequately train new employees on standard operating procedures and environmental controls associated with their day to day work. Had they done so the unintentional discharge may never have happened.

Lets learn to keep our waters clean!

Finally, for your reflection, how prepared was the client to respond to an unintentional release? Incidents do happen and clients need adequate response systems in place.

Textile Finishing Company

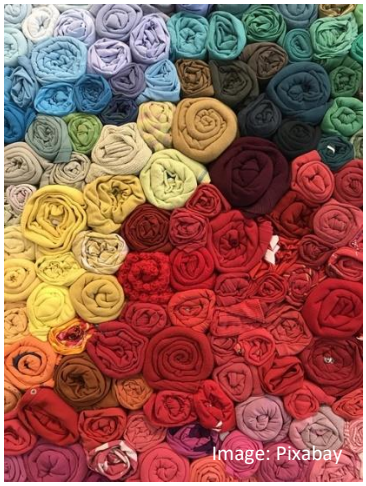


Image: Pixabay

A medium scale textile finishing company that has experienced rapid growth within a short period of time has decided to install a new production line to cater for increasing demand. The company dyes and prints fabrics on contract to several large-scale branded apparel manufacturing concerns. The company is seeking part financing through a term loan of LKR 100 million (approximately US$667,000) for the installation of a new production line.

Wastewater generation from textile finishing factories is a high environmental and social risk concern as it is produced in large volumes and contains a variety of toxic substances from the dyes, salts, acids, alkalis, oils, and fats as well as (chlorinated) solvents that may be used in the finishing processes.

Pollution Prevention *– the client will avoid the release of pollutants, or when avoidance is not feasible, minimise and/or control the intensity and mass flow of their release. This applies to the release of pollutants to air, water, and land due to routine, non-routine, and accidental circumstances with the potential for local, regional, and transboundary impacts.*
IFC PS 3

E&S Risk Assessment

The E&S risk assessment noted that the factory was located close to a wetland and that the site bordered a stream that flowed through the wetland. The stream supported healthy populations of plants, animals, and common fish species. It was noted that the company had to meet stringent wastewater quality standards, set by the regulatory authority, to discharge wastewater into the stream and that the factory had an in-house effluent treatment plant with physical, chemical, and biological treatment units.

The E&S risk assessment did not investigate whether the effluent treatment plant was discharging wastewater that met the quality standards and whether it had adequate capacity to treat an increase in wastewater volumes from the new production line.

It was observed that the company had limited land for the expansion of the new production line.


Image: Pixabay

Dead Fish Floating

Shortly after the granting of the loan and the release of the first disbursements the local community observed dead fish floating in the stream. Suspecting that the textile finishing company had

discharged harmful chemicals into the stream, despite denials from the company, the local community launched a public protest which attracted media attention.

This in turn triggered an investigation by the regulatory authorities. They established that the quality of the treated wastewater discharged from the factory fluctuated frequently; that the capacity of the effluent treatment plant was inadequate for the wastewater volumes generated by the plant; and that there were no plans to upgrade the capacity of the effluent treatment plant due to space constraints.

It was further established that the company had not obtained environmental clearance for the factory expansion from the Central Environmental Authority.

Risk Exposure

The company was ordered to stop the expansion immediately and to relocate the new production line within an industrial zone. In addition, due to the high brand profile of the company's customers many ended their contracts to manage reputational risks associated with poor environmental practices in their supply chains.

Image: Pixabay

The impact to the company's cash flow impacted their ability to meet their loan repayments and the bank decided to stop any further loan disbursements scheduled.

Points of Reflection

1. Whilst not the only activity in an E&S risk assessment, as we noted with the first case, a compliance check with national and local environmental and social regulatory requirements is essential. Loans should not be granted without demonstrable evidence of legal compliance on file.

   There can be a number and wide variety of E&S regulations that a client may be required to comply with ranging from effluent discharge, air emissions, hazardous substances permits, to occupational health and safety requirements, to labour laws.

   Legal registers that assist lending officers to identify the regulatory requirements for different sectors need to be developed as part of a bank's environmental and social management system.

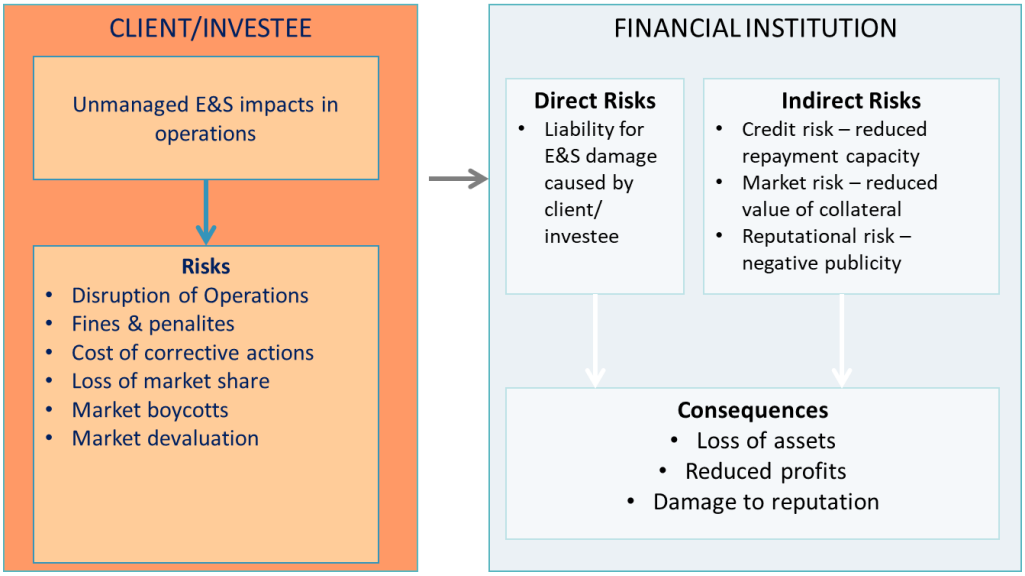
2. This case clearly demonstrates the importance of checking the capacity of existing pollution control systems to handle increased volumes of effluent, emissions and waste streams that are likely to arise from production expansion projects.

   Expansion and production process upgrade projects also present an opportunity to consider process changes that improve resource use efficiencies and reduce emissions and waste streams.

Final Reflections

Poorly managed impact = business risk for the client = credit risk for the bank

These cases have clearly shown the relationship between an operations potential E&S impacts and the business risks associated with a failure to manage those impacts. In turn we saw how those business risks turned into a credit risk for the lender. Most of which are summarised in this diagram below showing how a client's unmanaged E&S impacts can ultimately translate into several direct and indirect risks to a bank.



A bank's exposure extends beyond the E&S risks of a specific project-related transaction

Furthermore, all three cases demonstrate the challenge of identifying the breadth of potential sources of environmental and social impact and the importance of understanding what aspects of a client's operations the bank will be exposed to on granting a loan. As noted in all three cases, granting a loan for a specific project does not mean that the bank's exposure is limited to the E&S risks of that project.

With respect to general corporate facilities it is important to determine all the business operations a client may be involved in. For example, a facility to a holding company earmarked for their clothing retail concern may well be exposed to another operation under the holding company that is less environmentally and socially benign.

When is the best time to undertake an E&S risk assessment of a client's operation?

The experiences of these three cases raise the questions:

1. When is the best time to undertake an E&S risk assessment? and

2. How should the E&S risk management system be designed to ensure that critical findings are flagged early on and the appropriate scope of risk assessment determined?

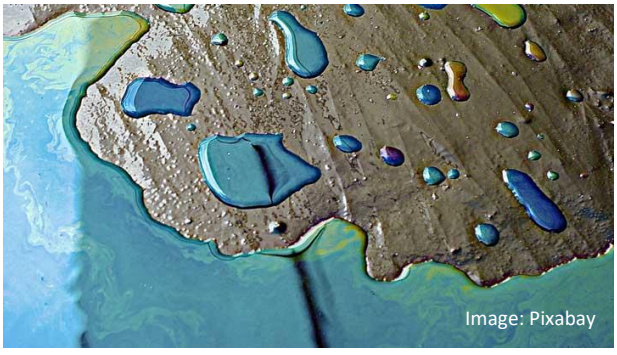
There is a sense that in all three cases the E&S risk assessments were rushed, lacking depth, and not focused on the critical concerns. In addition, there seemed to be no mechanism for key risks/concerns to be flagged early on and the appropriate scope and focus of the E&S risk assessment determined. Such as whether to include existing operations, the sensitive location of facilities, the adequacy of space for expansions, the capacity of existing pollution control systems to cope with increased volumes of emissions and wastes?

For example, flagging the chemical warehouse as has having high E&S risk concerns immediately after a short initial site visit and pressing pause would have given the credit team time to regroup and determine what needed to be done to investigate these concerns further. Is the chemical warehouse of this size compatible with its location? Would the client be better off expanding elsewhere? Has the warehouse been designed for safe storage and handling of hazardous substances and how well does the client perform regarding the safe transportation, handling, and storage of hazardous substances?

With respect to the metal plating company the bank made the call that the existing operation did not need to be considered as that operation would be closed once the new plant was commissioned. What information was available about how well the client was managing their E&S impacts before that call was made? Was the bank already familiar with the existing operations, its E&S impacts and how well the client was controlling and managing them? Requesting a client to make some improvements to their E&S management systems at the existing operations might have been a worthwhile condition of financing.

The pressure of moving a loan application through the credit appraisal process is often a reason given for rushing the E&S risk assessment. However, as we have seen, this can be to the detriment of the portfolio.

What needs to be changed to existing credit risk management processes to ensure that adequate risk assessments are conducted? For clients who are already on the bank's books can the E&S risk assessment of their operations be conducted independently of a facility application? Does it have to be captured at the point of a loan application when there is considerable pressure to get decisions made? Would it be better to have a record of a client's E&S impact management performance on file already?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