
Dr. Geetanjoy Sahu
Assistant Professor & Chairperson
Centre for Science, Technology & Society
School of Habitat Studies
Tata Institute of Social Sciences (TISS)
Deonar, Mumbai-400088
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ACM: Asbestos Containing Material
ASSBY: Alang-Sosiya Ship Breaking Yard
ASSRGWA: Alang-Sosiya Ship Recycling & General Workers' Association
CPCB: Central Pollution Control Board
COP: Conference of the Parties
CRZ: Coastal Regulation Zone
EPA: Environmental Protection Act
ESIC: Employees’ state Insurance Corporation
GMB: Gujarat Maritime Board
GCCCI: Gujarat Chamber of Commerce and Industry
HPC: High Powered Committee
ILO: International Labour Organization
ISSSAI: Iron Steel Scrap & Ship-breakers Association of India
IMC: Inter-Ministerial Committee
LDT: Light Displacement Tonnage
MoEF: Ministry of Environment and Forests
NHRC: National Human Rights Commission
NIOH: National Institute of Occupational Health
OECD: Organisation for Economic Co-operation and Development
PCB: Pollution Control Board
PCBs: Poly Chlorinated Biphenyls
RTI: Right to Information
SPCB: State Pollution Control Board
SME: Small and Medium Enterprises
SRUA: Ship Recycling Industries Association
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Introduction
The ship breaking activity in developing countries like India has been subject to scrutiny and criticism for various reasons. At present, the ship breaking activity is indiscriminately allowed in developing countries for short-term economic gain and revenue generation and to meet the domestic requirement of steel, but the costs for workers' health and the environment are alarming. Environmental protection and workers' safety in ship breaking yard at Alang-Sosiya in India are matters of great concern. No doubt, environment and labour are subject to regulation at different levels and there is no dearth of international, national and state laws to regulate the behaviour of hazardous ship breaking industries and protect the rights of workers in ship breaking yard. However, a plethora of such rules and regulations has not resulted in preventing environmental pollution from hazardous ship breaking industries and violation of workers' right to safe working conditions continues to increase. While there are a number of studies available that examine the impact of hazardous ship breaking industries on environment and how workers' right to safe working conditions have not been implemented¹, there is hardly any systematic attempt to unravel the emerging challenges, particularly at the state and local level for the protection and improvement workers' working and living conditions from hazardous ship breaking activities. In this context, this project report aims at identifying the major challenges of implementing rules for the protection and improvement of workers' rights at the

micro-level through an in-depth analysis of ship breaking workers at Alang-Sosiya, Bhavanagar district of Gujarat and proposes how to enhance the involvement of state and local actors in the implementation of workers' right in hazardous industries and continue sustainable ship recycling activity at Alang-Sosiya.

Methodology
This study is based on intensive field work and survey of the ship breaking yard at Alang-Sosiya conducted from 21st April 2013 to 30th May 2014. A number of stakeholders including ship breaking industrial unit owners, ship breaking workers, trade union leaders, environmental NGOs and activists, lawyers representing environmental groups, members of ship breaking industries association, staffs of Gujarat Maritime Board, Gujarat Labour & Employment Department, Gujarat State Pollution Control Board, Gujarat Industrial Safety and Health Department, officers from the Ministry of Environment & Forests, Health, and Labour both at the Central and State Government of Gujarat level have been interviewed to explore the implementation challenges for the workers' rights at the ship breaking industries at Alang-Sosiya, Bhavnagar. A review of Supreme Court judgments related to ship breaking activity at Alang, Technical Expert Committee Report, High Powered Committee Report, Annual Environment Report of the MoEF, Central and State Pollution Control Board reports related to hazardous wastes, Health survey report of National Institute of Occupational Health, and various non-government organisations reports such as Greenpeace report, Toxic Watch Alliance reports, Ship breaking Platform for NGOs reports, Basel Network reports, etc, has also been done to understand different dimensions of ship breaking activity and identify factors that contributed to non-compliance of labour laws applicable for ship breaking activity. More importantly, the local politicians, especially leaders of the village around the Alang-Sosiya ship yard
have also been interviewed to understand their position vis-a-vis the ship breaking activity. Also, information on government intervention and activities has been obtained through RTI.

Outline of the Project Report

The project report is divided into four chapters. In this Chapter, we have discussed the key questions that are addressed in this report and methods and tools used to assess and examine critically the challenges of implementing rules for the protection and improvement of workers' rights. A detailed background about the ship breaking activity at Alang-Sosiya is discussed in Chapter II. Chapter III highlights the current working conditions and major challenges for the implementation of workers' rights. Finally, Chapter IV summaries the major findings of the report and outlines the possible interventions required to be made by various stakeholders to carry out sustainable ship breaking activity at Alang-Sosiya.
CHAPTER II

Alang-Sosiya Ship Breaking Industries: A Historical Perspective

Ship breaking industries at Alang-Sosiya in Bhavnagar District of Gujarat is one of the largest ship breaking industries in the world. Till 1970s ship breaking was a highly mechanised industrial operation carried out in the shipyards of Great Britain, Taiwan, Mexico, Spain and Brazil. But as the cost of upholding environmental and health and safety standards in developed countries has risen, ship breaking has increasingly shifted to developing countries in Asia. To maximise profits, ship owners send their vessels to the scrap yards of India, China, Pakistan, Bangladesh, the Philippines, and Vietnam where health and safety standards are not effectively implemented and workers are desperate for work. It is estimated that over 100,000 workers are employed at ship breaking yards worldwide. Each year between 200 and 600 sea-going ships of over 2,000 dead weight tons (dwt) are dismantled worldwide. Nowadays two thirds or more of these ships are dismantled on beaches and river banks on the Indian sub-continent, with Bangladesh currently holding the largest share of the market.

Between 2001 and 2003, 14% of the ships that went for scrapping flew the flags of EU Member States and 18% the flags of states which acceded to the EU in 2004. At least 36% of world shipping tonnage in 2006 was owned by companies domiciled in the EU. Approximately 100 warships and other government vessels flying EU flags - most of them French and British - are expected to be decommissioned in the next 10 years. The naval vessels that were built between the 1960s and the early 1980s contain relatively high quantities of asbestos and other hazardous materials. From the ships scrapped between 2006 and 2015 an estimated, 5.5 million tonnes of materials of potential environmental concern will end up in dismantling yards (in particular oil sludge, oils, paints, PVC and
asbestos). None of the sites used for ship dismantling on the Indian sub-continent has containment to prevent pollution of soil and water, few have waste reception facilities, and the treatment of waste rarely conforms to even minimum environmental standards. At present there is "green" ship recycling capacity, i.e. conforming to environmental and safety standards, to handle at most 2 million light displacement tonnage (LDT) – the net weight used to calculate scrap value) per year worldwide, which is around 30% of the predicted total scrapping demand in normal years. Most of these facilities - particularly in China, but also in some EU Member States - find it difficult to operate, as they cannot offer the same scrap prices and have much higher costs than their competitors in South Asia. Ship scrapping is an important source of raw materials in South Asia. Bangladesh derives 80-90% of its steel from end-of-life ships. The prices paid for them by ship-breaking companies are now well in excess of $400 per LDT in Bangladesh and thus considerably higher than in other countries.²

Ship breaking industry, like other industries in India, has grown and expanded over time in the past three decades. Till the sixties, the ship breaking in India was confined mainly to the breaking of barges, small sized ships and casualty ships. This activity grew into full fledged industry by the 1979³ and was carried out in Darukhana yard, near Bombay. The Central and Gujarat State Government selected the coastal village of Alang as the site for India's second large scale ship breaking yard after Mumbai as a result of specific policy decision. In 1978, the Central government adopted a policy of importing ships ready for scrapping by the Metal Scrap Trade Corporation and created a 'ship breaking development fund' for this purpose. In order to diversify ship breaking activity away from Mumbai, a number of studies carried out in the early 1980s by the Metal Scrap

² For more details, see European Union Green Paper on Better Ship Dismantling, 2007
Trade Corporation and the Gujarat State Government. In January 1982, the Gujarat Chamber of Commerce and Industry (GCCl) organised a meeting with ship breakers and then the Gujarat Government decided to allocate an initial fund of Rs 2,50,000 for the ship breaking industry. In 1982, representatives of the ship breaking industry joined government officials in a detailed study of the coasts. Alang, located 56 km south of the city of Bhavnagar, was identified as a suitable site for beaching heavy ships, given its continental shelf, high tidal range and comparatively mud free conditions. Alang offers a unique combination with the highest tidal range in the country of 10 m – 30 ft, seaward slope and firm seabed and was thus ideally suited for ship breaking activities. Alang ship breaking yard, stretches over 10 km and covers two yards (Alang and Sosiya). In the last three decades, Alang has grown from a small coastal village, populated with fishermen and farmers, to become the world’s largest ship breaking yard. Today, however, the villages of Alang and Sosiya on the Gulf of Khambhat have become the focus of considerable activity and attention, not for building ships but for breaking and recycling them.

Located on the western coast of Gulf of Cambay in Bhavnagar district of Gujarat, the Alang-Sosiya Ship Breaking Yard (ASSBY) is one of the largest in Asia and has been expanding ever since it started operating officially with the beaching of the M.V. Kota Tenjong on February 13, 1983. The Alang-Sosiya ship breaking yard has beached nearly 6318 vessels from 1983 to 2013 which is of 47315530 LDT and produces three million metric tons of scrap metal annually. It is also important to mention here that the iron and steel recovered from the ship-breaking activities account for an estimated 10–15% of India’s steel production.

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5 Information obtained from Ship Recycling Industries Association Website: http://www.sriaindia.com, Accessed on 22.11.2013
The ship breaking industries at Alang-Sosiya also contributed to the growth of downstream industries including re-rolling mills, foundries, oxygen plants, transport and recycling and resale of a wide range of items, from turbine engines to washbasins and armchairs. At its height, during the mid-late 1990s, the iron and steel industry combined with secondary activities was estimated to be worth in excess of US$ 500 million per annum contributing significantly to the revenues earned by the Gujarat Maritime Board and the State government from this industry. Ship breaking yard at Alang, Asia’s largest, has recorded highest number of 415 ships coming for breaking during fiscal ended March 31, 2012 with the 38.60 million tonnes of light ton displacement or LDT against 28.20 million tonnes LDT recorded in 2010-11. The annual turnover of the industry stands at Rs 6,000 crore. The profit margins in the ship breaking industry are huge and big-time contractors make unbelievable profits. There are a total of 169 plots available for ship breaking but at present only 132 plots are functioning. Each leased plot at ASSBY employs between 150-200 workers and towards the end of 2013 there were around 35,000 workers employed in approximately 132 working plots. The Gujarat Maritime Board was identified as the nodal agency to monitor day to day activities of the ship breaking industries and was given the task to ensure the necessary infrastructure requirements for the ship breaking industries such as: acquisition of land, planning and allotment of plots to ship breakers and the provision of water, electricity, roads and communications.

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6This information was shared by the Gujarat Maritime Board officers in May 2014.
7For more details, see the UNESCO (2004), Impacts and challenges of a large coastal industry, Alang-Sosiya Ship-Breaking Yard, Gujarat, India.
The following Table 1 gives year-wise number of scrapped ships at Alang-Sosiya Ship Yard from 1983-2013:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Ship</th>
<th>LDT</th>
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<tbody>
<tr>
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<td>5</td>
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<td>1983-84</td>
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<td>1992-93</td>
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<td>2002-03</td>
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<td>2003-04</td>
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<td>2009-10</td>
<td>348</td>
<td>2937802</td>
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<tr>
<td>2010-11</td>
<td>357</td>
<td>2816231</td>
</tr>
<tr>
<td>2011-12</td>
<td>415</td>
<td>3856071</td>
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<tr>
<td>2012-13</td>
<td>394</td>
<td>3847727</td>
</tr>
<tr>
<td>Total</td>
<td>6318</td>
<td>47315530</td>
</tr>
</tbody>
</table>

Map 1: Location map of Alang-Sosiya Ship Breaking Yard

Process of Ship Breaking
The process of ship breaking is a complex one, especially when ship breaking is carried out at a beach and not on a dry dock like China. The process of breaking a
ship structure for scrapping or disposal includes a wide range of activities, from removing all gear and equipment to cutting down and recycling the ship's infrastructure. Ship breaking is a challenging process, due to the structural complexity of the ships and the many environmental, safety, and health issues involved. While ship scrapping in dry docks of industrialized countries is regulated, ship breaking on beaches or alongside piers is less subject to control and inspection. The process of ship breaking/recycling is a complex one and involves a number of activities and requires clearance and approval from a number of government departments at different levels. The ship breaking activity starts with conducting a vessel survey so as to identify the type of ship and its basic components, removing fuels, oils and other combustible liquids before any hot-work can be done, removing equipment such as fixtures, anchors, chains, propellers and other small fixtures. These are removed and sold if they are in a usable condition, removing the asbestos containing material (ACMs) and polychlorinated biphenyls (PCBs): this is a complicated and long procedure. The body of the ship is cut in order to separate large sections of the ship, preparing surfaces for metal-cutting: this process often involves removal of toxic substances from the surface of the body and different structures of the ship, metal cutting from different sections of the ship, selling scrap: Metals like steel, aluminum, copper, nickel and other alloys are sold to the highest bidder. Reusing: Several parts of the ship like the engines, motors, pumps, winches, radar and other electronic equipment is sold to brokers.\(^9\) The following diagram taken from the Ship Breaking Code, 2013, p.124, Ministry of Steel, Government of India, New Delhi, explains the process involved before the ship breaking activity starts:

Flow Chart 1: Procedure involved in granting clearance for ship breaking
CHAPTER III

Implementation of Workers' Rights in Ship Breaking Industries: An Empirical Analysis

The working and living conditions of the workers and environmental implications of ship breaking industries at Alang-Sosiya have been debated time and again ever since the industries started functioning in 1983. A number of studies (Basel Action Network, 2009; Krishna, 2006 and 2008; UNESCO, 2004; Tony George Puthucherril, 2010) have been carried out to examine the health and environmental impact of ship breaking industries. What is lacking, however, is to understand how and why the working and living conditions of migrant workers have not improved over the last three decades. This section gives a detailed description of current working and living conditions of workers at Alang-Sosiya ship breaking yard and then highlights the key determining factors for non-compliance of various labour laws and the Court directions to protect and improve workers' rights.

Profile of the Migrant Workers

The ship breaking activity at Alang-Sosiya provides a huge employment opportunities for around 35,000 unorganised migrant workers directly, breaking almost one ship a day. Whereas the ship breaking industrial owners are mostly from Uttar Pradesh, Gujarat, Punjab and Maharashtra. Thousands of workers also get employment opportunities indirectly in allied industries who are mostly from Gujarat. Unlike the ship breaking industries of China and Japan, the ship breaking industry at Alang-Sosiya is labour intensive. The survival of the industry depends on the availability of labour. The work at the ship breaking yard is labourious and unless the work increases substantially new labour is not inducted to work. In the
last 30 years, however, there is hardly any labour shortage for the ship breaking yard. Thousands of workers migrate to Alang-Sosiya from different parts of the country, especially from Odisha, Uttar Pradesh, Bihar, Jharkhand and West Bengal where unemployment rate is high and thousands of workers are desperate for jobs at Alang-Sosiya ship breaking yard without proper safety measures and protection. Around 99% of the total work force at Alang-Sosiya are migrant workers from states like Uttar Pradesh, Odisha, Bihar, Jharkhand and West Bengal. These migrant workers are landless or marginal rural landowner households and have almost no alternative employment opportunities in their home states. The ship breaking yards in Alang-Sosiya emerged as a destination for these migrant workers for employment since 1983.

The migrant workers in the industry can be broadly categorised as skilled workers, semi skilled and unskilled workers. The remuneration and provisions for skilled workers are better as compared to other types of workers. The above three categories of workers are again divided into 11 categories which include: (1) Jodiwala – workers who move the heavy iron plates from one place to another; (2) Battiiwala – workers who cut the ship with oxygen torches powered by liquid petroleum gas cylinders, (3) Helpers who primarily assist the Battiiwala and in all other duties as required, (4) Common labourers, (5) Mukadam – contractors who function as leaders and place workers at appropriate stations, (6) Supervisors, (7) Winch operators, (8) Crane drivers, (9) Fitters, (10) Carpenters and (11) Foremen. This categorisation, however, is not mutually exclusive to each other and the workers keep doing other types of work depending on their skill and interest and more importantly, availability of work in the ship breaking yard.

Living Conditions of the Migrant Workers

By and large the ship breaking workers live in close proximity to their work place. The places where they live are either owned by nearby village people or in some cases the land belongs to Gujarat Maritime Board. The migrant workers make temporary arrangement to live there as there is no housing facility developed either by the employer or by the state government of Gujarat. In every Inter-Ministerial Committee from 2004-2013, the employers and the representatives of Gujarat Government have assured to complete the construction of dormitory type accommodation for accommodating 1008 workers. For example, in the 16th IMC meeting on 1st October 2013, the SRIA members stated that work order for construction of dormitory type accommodation for accommodating about 1008 workers has been issued and the work will start within 30 days and will be completed in 18 months but no significant development has been made in this direction till 26th May 2014, except the foundation work. At present, due to lack of housing facilities, slum areas have sprung up all around the ship breaking industries and also one finds workers sleeping on the road divider during night time. Majority of the workers live in and around the ship breaking plots in rented shanty dwellings usually without adequate facilities for potable water, sanitation, electricity, drainage systems and education for their children. No doubt the GMB has set up 12 stand posts for workers to take bath but for 35,000 workers these stand posts are inadequate. Similarly, 6 toilets have been constructed by the GMB for workers use but most of them lack water or regular cleaning and as a result, workers are forced go for open defecation. As far as drinking water facility is concerned, majority of workers buy water from local village people and only a few of them can manage water from the plot owner, says Ramkaran Prajapati, migrant worker from Gorakhpur District of Uttar Pradesh. But such arrangement is

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10 For more details, see 16th Inter-Ministerial Committee Meeting Minutes held on 1st October 2013, Ministry of Steel, Government of India, New Delhi
dependent on worker-employer relationship. There is no drinking water facility for the workers and whatever water is available in the GMB constructed stand posts are not adequate and also water doesn't come throughout the day and regularly.\textsuperscript{11}

Photo 1: Workers Living Area at Alang-Sosiya Ship Breaking Yard

Most of the workers don't bring their family members due to lack of basic facilities like housing, sanitation, water and eduction for their children and also the workers don't have access to public distribution system in the area, says Mr.

\textsuperscript{11}This information is shared by the workers during our data collection in September 2013.
Sudhir Palai, a migrant worker from Ganjam District of Odisha. There is also no community life for the workers or platform for recreational activities. Most of the workers prefer to live with their state community people. However, there is no conflict or discrimination among workers on caste and religion grounds. Workers prefer to cooperate with each other irrespective of their region, caste and religion background. Lack of basic facilities are the major concern of the migrant workers. The absence of basic facilities is blatant violation of both the Factory Act of 1948 and the Contract Labour (Regulation & Abolition) Act, 1970. Under the Labour (Regulation & Abolition) Act, working conditions of workmen should be safe and non-hazardous. There should be adequate facilities like drinking water, canteen etc for workmen. The employer should maintain register as required under this Act. Similarly, the Factories Act, 1948 provides for the health, safety, welfare, service conditions and other aspects of workers in factories. It applies to all factories employing more than 10 people and working with the aid of power or employing 20 people and working without the aid of power. It covers all workers employed in the factory premises directly or through an agency including a contractor, involved in any manufacture. The Act also requires the employer to provide adequate welfare measures like creche, canteen, wash room etc for the workers. The employer is also required to pay for overtime wages.

What is equally important to mention here, is that, there is no database created or maintained by the district authority about the number of migrant workers working in the ship breaking yard. Chapter II of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 specifies that the State Government shall appoint a registering officer for the purpose of registration of establishments employing Inter-State Migrant Workmen. It is also mandatory on the part of the employer to which this Act applies shall, within such
period as the appropriate Government may, by notification in the official Gazette, fix in this behalf with respect to establishments generally or with respect to any class of them, make an application to the registering officer, in such form and manner and on payment of such fees as may be prescribed, for the registration of the establishment. But unfortunately there is no systematic database created or documented about the number of ship breaking industries at Alang-Sosiya employing migrant workers from other states like Odisha, Uttar Pradesh, Bihar and other states. The ship breaking industries continue to recruit migrant workers without registering under the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Services) Act of 1979. The Act spells out categorically that no principal employer of an establishment to which this Act applies shall employ inter-State migrant workmen in the establishment unless a certificate of registration in respect of such establishment issued under this Act is in force. There is no compliance of these provisions at the Alang-Sosiya ship breaking yard and also no action has been taken by the competent authority against the employer for not registering the number of migrant workers employed by them.

The Act also emphasises that every principal employer and every contractor shall maintain registers and records giving particulars of the inter-State migrant workmen employed, the nature of work performed by such workmen, the rates of wages paid to the workmen and such other particulars in such form as may be prescribed. Every principal employer and every contractor shall keep exhibited in such a manner as may be prescribed within the premises of the establishment where the inter-State migrant workmen are employed, notices in the prescribed form containing particulars about the hours of work, nature of duty and such other information as may be prescribed. However, there is no database created by
the ship breaking units as far as the number of migrant workers working in the yard. The ship breaking unit owners rather argue that these migrant workers change their job very frequently from one unit to another unit and therefore, it is not possible to keep record of how many migrant workers are working in their ship breaking yard.

Average Income and Expenditure of Workers

Workers in ship breaking activities at Alang-Sosiya are daily wage workers. Work is readily available throughout the year and one needs no recommendation to get work here. However, generally, workers come here through contacts of friends and relatives who are already working here for several years. Around 92% of workers earn between Rs. 5000 to Rs. 10,000 per month. Every month workers' salary is paid by cash and not through cheque. However, the payment of salary is not fixed on a particular day of the month. Many workers informed us that the delay in payment needs to be addressed as we don't have other source of income. This is a clear violation of the Payment of Wages Act 1936. This Act outlines that every employer is primarily responsible for payment of wages to his employees and the employer should fix the wage-period, which may be per day, per week or per month, etc., but in no case it should exceed one month. It is the responsibility of the employer to make timely payment of wages. If the number of employees is less than 1000, then wages must be paid within 7 days of the expiry of the wage period, and in other case within 10 days of the expiry of the wage period. Besides, all payments of wages should be made only on a working day. It is also made mandatory that the employer should give wages either in cash or by cheque or by crediting in employee's bank account, after obtaining his written consent. A number of workers at Alang-Sosiya ship breaking yard, however, pointed out that there is always delay in getting wages and that's why they choose to shift from
one unit to another unit and their choice to shift from one unit to another unit is based on which employer can give them wages on a particular day of every month. It is also informed to us that the employer sometimes make unauthorized deductions from wages. If we don't return the safety equipments in good conditions or loose it then the employer deducts from their wages, says Sudhir Palai, migrant worker from the Ganjam District of Odisha.

Workers are also not getting any other financial benefits from the employers as laid down under several labour laws in India. For example, the Employees' Provident Funds Act, 1952 aims to provide for the institution of provident funds, family pension fund and deposit linked insurance fund for employees in factories and other establishments. Every employee, including the one employed through a contractor who is in receipt of wages up to Rs.6,500 p.m. shall be eligible to becoming a member of the funds. If the pay of a member-employee increases beyond Rs. 6,500 p.m. after his having become a member, he shall continue to be a member but the contribution payable in respect of him shall be limited to the amount payable on monthly pay of Rs.6,500. An employee ceases to be a member of the Employees' Family Pension Fund at the age of 60 years. The Act applies to every establishment which is a factory engaged in any industry specified in Schedule I and in which 20 or more persons are employed, and any other establishment employing 20 or more persons or class of such establishments which the Central Government may, by notification, specify in this behalf. As per the provisions of this Act, the ship breaking industrial workers are entitled to get provident funds and the State Government is the competent authority to ensure that every worker in the ship breaking yard shall get the benefit of this act.
Similarly, the Payment of Bonus Act, 1965 provides for the payment of bonus (linked with profit or productivity) to persons employed in certain establishments and matters connected therewith. This Act is applicable to every factory and to every establishment wherein 20 or more workers are employed on any day during an accounting year.

Likewise, the Payment of Gratuity Act, 1972 provides for a scheme for the payment of gratuity to employees engaged in factories, mines, oilfields, plantations, ports, railway companies, shops or other establishments. The Act enforces the payment of 'gratuity', a reward for long service, as a statutory retirement benefit. Every employee irrespective of his wages is entitled to receive gratuity if he has rendered continuous service of 5 years or more than 5 years. "I have not received any bonus, no provident fund, no gratuity in my last 15 years of work in the ship breaking yard. Also, I don't get salary when I take leave to go to my home state or for any other leave", says Mr. Ramkaran Prajapati from Gorakhpur District of Uttar Pradesh. They are not paid on Sunday and whenever they take leave or go to their home state and also the over-time wage for the workers is not as per the Factory Act of 1948 and Gujarat Factory Act Rules of 1963. Most of the workers do overtime in the ship breaking yard but the wages paid for every extra hour is between Rs. 25 to Rs. 30 which is a clear violation of Section 59 of the Factories Act of 1948. Section 59 of the Factories Act of 1948 lays down that if a worker works in a factory for more than nine hours in any day or for more than forty-eight hours in any week, he shall, in respect of overtime work, be entitled to wages at the rate of twice his ordinary rate of wages. The following Chart 2 & 3 explain the average income and expenditure of workers in the ship breaking yard:
Expenditure of workers

Majority of the workers in the ship breaking yard are between the age group of 20 to 45 years. The age composition of the workers is an important factor to be taken into account in understanding employer's attitude workers. Workers above the age of 55 years are generally not recruited as the employers feel that they cannot take the burden of heavy work load, and that they would be forced to return back to their home state or work on a salary not equivalent to other workers. In some
cases, we found old workers prefer to opt for the second option or take a lighter job like security guard in industries.

It is estimated that ship breaking workers work for around 180 days per year. Although workers are provided with identity cards containing personal details, including blood group, the migratory nature of the employment gives rise to several discrepancies and workers often lose benefits such as provident funds. Illiterate or having very low levels of education, the ship breaking worker at Alang-Sosiya come from families that live below poverty line. Not aware of their basic rights, they can be easily exploited. A combination of all these factors, coupled with inadequate facilities makes the place pathetic. The common saying among ship breaking workers is Alang se Palang (which means, from Alang to death bed) aptly captures the situations.

The workers at these scrap yards are unorganized and generally are not visible to law and even the prevalent of Inter-State Migrant Workers Act (ISMWA) is never followed to protect these migrants workers. And the Minimum Wage Act, Factory Act, Contract Labour Act and other related Acts are not implemented. It is neither a matter of concern for the home states like Odisha, UP, Bihar and Jharkhand from where the workers migrate to Gujarat. Implementing agencies have overlooked the rights of workers' time and again. There are no medical records on the short and long term impact of the ship breaking industries on Alang's migrant workers' (from Bihar, Uttar Pradesh, Jharkhand and Odisha) exposure to hazardous and inflammable substances. IMC ought to ensure that such records are created to get to the bottom of the goings on at Alang beach but IMC efforts in

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this direction has been unsatisfactory. The workers rights have been discussed in
different forums including the Inter-Ministerial Committee but so far no serious
attempts are made to ensure basic facilities like hospital, housing, water and
sanitation.

Training Programme for Workers

As mentioned earlier that workers engaged in the ship breaking activities are
exposed to the dangerous process of ship breaking and heavy metals and
hazardous wastes. No attempt was made from 1983-2003 to train these workers
about safety measures and how to protect themselves from accidents and injuries
and handle hazardous waste materials. In late 1990s, the civil society groups and
NGOs both in India and at the International level demanded before the
government of India for safe working conditions and even appealed to the
Supreme Court of India to issue directions against worst working conditions
without safety measures and training at Alang. As a result of which, the Gujarat
Maritime Board in 2003 made training for all workers in the ship breaking yard
compulsory and no worker is today allowed to get employment opportunity
without a training certificate from the GMB. The GMB claims that from July 2003-
March 2014 around 1,06,866 workers have been trained and the training
programme for workers varies from two to three days. The GMB training institute
has recruited staffs specialised in this field and also started introducing innovative
methods to orient and train the workers about the ship breaking activities. Most
of the workers find it useful, especially those who are involved in gas-cutting
activity. However, many workers feel that the training programme is too short

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15 For more details, see Gopal Krishna’s letter to the Chairperson Inter-Ministerial Committee (IMC) on
12th October 2012 “Seeking relief for recent cruel death of Alang workers, Shipbreakers arrest ahead of
IMC visit to Alang beach”. Also, available at this link: http://www.toxicswatch.org/2012/10/seeking-relief-
for-recent-cruel-death.html?m=0

16 This information was shared by the training staffs of Gujarat Maritime Board in May 2014.
and not possible to know the complex issues involved in the ship breaking industries. A major lacuna in this training programme has been that workers are not trained how to handle hazardous wastes and deal with disasters.\textsuperscript{17} Also, workers are not trained or given orientation of the rules and regulations governing dismantling and their rights in the ship breaking yard.\textsuperscript{18}

These issues are also raised by the members of the Standing Monitoring Committee (SMC) on Ship breaking appointed on the direction of the Indian Supreme Court. The committee observed that the job-specific competence training to the workers is not being imparted in the institute. It is left to the ship breakers to appoint any worker for a specific job. The ship breaking yard owner then send these workers to the institute for the safety awareness training. It was recommended by the committee that GMB should come out with a policy detailing the competence training requirements for specific jobs which the workers and supervisors are required to undergo. It was further recommended that the institute which is at present only doing the safety awareness training program may enhance the training by including various competent courses as per the requirements for specific ship breaking activities. It is also recommended that the institute should come out with specialized training on safety and operational training programs for workers who are required to handle hazardous/radioactive materials with respect to their safety and also for safe removal/handling of such materials. The committee also observed that the training programmes are lacking practical aspects. They have been asked to include the practical training aspect also as a part of their training course.\textsuperscript{19} The GMB promised before the Standing

\textsuperscript{17}This information was shared by ship breaking workers at Alang-Sosiya during our field study in May 2014.


\textsuperscript{19}For more details, see Site Visit Report of the Standing Monitoring Committee on Ship breaking Yards at Alang, January 2011
Committee to implement these suggestions within six months but no seriousness has been shown in this direction. The following Chart 4 explains types of training given to workers by the GMB.

<table>
<thead>
<tr>
<th>Training received</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General safety for all</td>
<td>97.43</td>
</tr>
<tr>
<td>use of PPE</td>
<td>92.28</td>
</tr>
<tr>
<td>Fire Fighting</td>
<td>90.35</td>
</tr>
<tr>
<td>Gas cutting</td>
<td>60.77</td>
</tr>
<tr>
<td>Handling of Hazardous waste</td>
<td>0.04</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>97.43</td>
<td>2.57</td>
</tr>
<tr>
<td>92.28</td>
<td>7.72</td>
</tr>
<tr>
<td>90.35</td>
<td>9.65</td>
</tr>
<tr>
<td>60.77</td>
<td>39.23</td>
</tr>
<tr>
<td>0.04</td>
<td>99.36</td>
</tr>
</tbody>
</table>

Inadequate Health Treatment Facility

One of the most serious challenge for the workers' rights has been the lack of adequate health-care system at Alang-Sosiya ship breaking yard. Alang-Sosiya has just two health facilities — an understaffed nine-bed hospital run by the Red Cross Society and a small clinic run by a private doctor. Neither have necessary facilities to treat potentially fatal emergencies, and there is no ambulance. No health facility was available to workers till the Red Cross Hospital was set up in 2003 at Alang-Sosiya. Since 2003 the Red Cross Hospital has been the only option for any minor accidents or health issues of workers. The Red Cross Hospital has been operating with an assistance of Rs 12,00,000 per annum from the GMB every year. The remaining expenditure for operating the hospital has been
arranged by the Red Cross Society Trust. On an average 90 to 100 workers come for treatment everyday to the Hospital for minor injuries but the workers cannot be treated in the hospital for more than 12 hours and for any major injuries workers have to go to Bhavnagar Hospital or private hospital. Also, the hospital which was operating for 24 hours is now for the last two years open from 8 am to 8 pm so no treatment can be happened beyond this time. There are three medical officers but none of them have MBBS degree whereas the medical superintendent has MBBS degree. There are three specialists: Orthopedic, Chest Physician, and Skin specialists but they visit only on Thursday from 3 to 5 PM. Despite several demands, no serious attempt has been to recruit a permanent Orthopaedic doctor. Similarly, there is no operation theatre and ambulance in the hospital to address emergency situation and most of the time the workers have to wait for the government ambulance or the ambulance provided by the ship breaking association. Persons who have witnessed accidents at the yard say it takes an hour for any ambulance to reach the yard via a 50-km, two-lane state highway from Bhavnagar city. We do not call it a hospital which does not have a permanent orthopaedic surgeon nor an ambulance,
Photo 2: Discussion with migrant workers at the Alang-Sosiya Ship Breaking Yard in September 2013

Workers are aware that their working and living conditions result in illnesses such as diarrhoea, jaundice, stomach pain, tuberculosis, fever and skin diseases, and cause work accidents which are sometimes lethal. In a few earlier studies, it was also pointed out that migrant workers, being away from their family, there was a high indulgence in unsafe sex exposing them to HIV and venereal diseases. According to a 1998 report published by the Bhavnagar Blood Bank, increasing numbers of cases of sexually transmitted diseases, HIV, tuberculosis and hydrocort (enlargement of the testicles largely due to physical injury common among
labourers who do hard menial jobs without proper protection to their genitals) were detected among the labourers. However, because of AIDS awareness programmes initiated by the Red Cross Society and also government departments, there is no sexually transmitted disease case observed over the last ten years. Also, local people are vigilant against prostitution activities in their vicinity.

Inadequate health facilities at Alang has been raised and discussed in various forums ranging from Supreme Court to Inter-Ministerial Meeting. The protection and improvement of workers' health in hazardous industries has been raised by the Supreme Court in a number of environmental litigations. The health issue of workers was also discussed many times in the inter-ministerial committee on ship-breaking, but the health facility scenario at Alang-Sosiya has not improved. For example, the inter-ministerial committee in its meeting in 2005 proposed for the state’s Health Commissionerate to run a hospital there, that Bhavnagar Medical College could start an Out-Patient Department there, that the Red Cross hospital should be equipped, that a modern hospital with X-ray machines, CT scans, a blood bank and an operation theatre must be established, and that the state-run Employees State Insurance Corporation (ESIC) must run the hospital and register workers. But seven years on, there is still little progress.

The Employee State Insurance Act, 1948 provides for the provision of benefits to employees in case of sickness, maternity and employment injury. To protect the workforce from the physical and financial distress arising out of sickness, maternity, employment injury, etc, the Employee's State Insurance Scheme was devised. Under this scheme, the employers play a major role in the functioning of the Scheme, through registration of its employees, remittance of contribution and through compliance with the provisions of the Act. This guide is meant to be a
reference booklet for the covered and coverable employers, whose role is pivotal for the success of the Scheme. The ESI Scheme is a comprehensive social security scheme devised to protect the employees covered under the Scheme against financial distress arising out of events of sickness, maternity, disablement / death due to employment injuries and to provide medical care to the employees and their families. The Scheme is based on the principle of ‘pooling of risks and resources’, wherein that section of the population which is exposed to risks of the same nature, come together to mitigate the physical and financial distress arising out of such risks. The Scheme is applicable to only those areas where the Scheme is extended/made applicable by the State Government by notification. The Scheme applies to all factories, shops and establishments located in the implemented areas, where ten or more persons are employed. Thus, the Scheme is applicable to all factories, shops, hotels, restaurants, cinema theaters, offices, medical institutions, educational institutions, etc. subject that: the employer is located in an area to which the Scheme is extended to by the State Government, and ten or more persons are employed. All employees of a covered unit, whose monthly remuneration (excluding overtime) does not exceed Rs.15,000/- per month, are eligible to avail benefits under the Scheme.

The Scheme is administered by the Employees State Insurance Corporation, set up under the ESI Act, 1948. The Corporation (similar to Board of Governors) the comprises of representatives of the employers, employees, the Central Government, State Governments, eminent medical professionals and that of the Parliament. Besides the Corporation, there is a Medical Benefit Council which advises the Corporation on matters related to the extension of medical care to the beneficiaries of the Scheme.
To implement this scheme in the ship breaking industries at Alang-Sosiya, the Labour & Employment Department of Gujarat notified in its official gazette on 1st October 2009. There are 128 ship breaking plot owners registered under this Scheme. A total number of 16,067 workers have been registered by the employers under this scheme. Pehchan enrollment has already been started and a total number of 2,707 enrollments has been completed.

The ESI scheme makes it very categorical that all employees whose monthly remuneration (excluding overtime wages) does not exceed Rs.15,000 per month are entitled for coverage under the Scheme, the employer need to register those employees alone. All employees, including casual labour, temporary employees, employees employed through contractors (outsourced) etc. have to be registered by the employer. Once registered, in respect of employees who are being registered under the Scheme afresh, an insurance number is allotted and a Temporary Identity Card (TIC) is generated; this TIC is valid for a period of 3 months from the date of registration, within which the employee has to enroll for the Pehchan card. However, in case of Alang-Sosiya ship breaking yard, while 16,067 workers are registered under this scheme, the number of pehchan card is issued only to 2,707 workers and no effort has been made to create awareness among the workers to enroll for the pehchan card which is very important to avail the benefits under the ESI scheme.

The Employees State Insurance Act As per the ESI Scheme norms for constructing a hospital with 100 beds at Alang-Sosiya, the notification issued by the Labour and Employment Department of Gujarat requires at least 25,000 employees to be registered under this scheme. The ship breaking association has been demanding to relax this norm as an exceptional case and allow the ESIC to construct a
hospital at Alang-Sosiya. The ship breaking association in fact has filed a litigation in the Gujarat High Court to resolve this issue which has been pending for the last three years. Even the ESIC takeover is being delayed by an ongoing case in the Gujarat High Court. While ESIC contends there are not enough registered workers at Alang-Sosiya to warrant a 100-bed hospital, owners of ship-breaking yards say they will accept nothing less. As the case is pending in the Gujarat High Court, there is very rare chance that the corporation will begin even the basic enrollment of workers at the yard till the case is settled. It has been argued by the SRIA that since there is no health facility at Alang-Sosiya and the current arrangement by the ESIC to give treatment to workers in ESIC hospital at Bhavnagar which is 55 kms away from Alang-Sosiya has proved to be ineffective. Also, the SRIA members allege that the ESIC is not settling the bills of workers who get treated in hospitals and whenever we take our workers to ESIC arranged hospital at Bhavnagar, we have been asked to settle the earlier bills pending by the ESIC, says V.B. Tayal, Vice-President of SRIA. This allegation was rejected by Dr. Sant Ram, State Medical Commissioner, ESIC, who in fact is of the opinion that there has been no delay in clearing bills or pending of bills for all the treatment of workers made in the ESIC hospital at Bhavnagar. We rather find it difficult to admit workers because most of the times the employer brings injured workers without panchan card, which is an important document to get admitted or avail the benefits.

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Environmental Implications

There are a number of international conventions, treaties and regulations with reference to ship breaking industries which include: the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal of 1989; the International Labour Organisation guideline of 2003 outlined a detailed provisions for the safety and health of workers in ship breaking industries; the European Union Green paper on better ship dismantling 2007; and the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009. The following section gives an overview of these conventions and treaties and examines their implications in the context of ship breaking activity in India.

The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal of 1989 is one of the landmark convention to prevent environmental pollution from hazardous industries. In the late 1980s cases of toxic waste from industrialised countries sent to developing countries resulted in international outrage. Eight thousand drums of chemical waste dumped in Koko Beach, Nigeria, and ships like the Karin B sailing from port to port trying to offload their cargoes of hazardous waste made the newspaper headlines. A reinforced international legal framework was called for. The United Nation's Basel Convention was adopted on 22 March 1989 to set up a framework for controlling the movement of hazardous wastes across international frontiers. The Convention entered into force on 5 May 1992 and, as of 31st May 2014, there are 181 Parties to the Convention.

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22 The main aim of this study is to critically understand the challenges for the implementation of workers' rights through an empirical analysis of Alang-Sosiya ship breaking yard. The environmental implication of ship breaking activities at Alang-Sosiya has been assessed through secondary sources and the study only makes a reference to environmental issues. For a detailed discussion on environmental implications of the ship breaking yard, see the writings of Gopal Krishna at this website: http://www.toxicswatch.org/
The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. The main objectives of this Convention are aimed at the reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal; the restriction of trans-boundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management; and a regulatory system applying to cases where trans-boundary movements are permissible.

The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 has laid down a number of provisions to protect and improve working conditions as well as environment during the ship breaking activity. Regulation 18, 19, 20 & 22 of the Convention, for example, calls upon the signatory members to take a number of steps to ensure the safe and environmentally sound ship recycling management activity. Some of these provisions require the signatory members to the convention to prepare a Ship Recycling Facility Plan and plan shall include a policy ensuring workers' safety and the protection of human health and the environment, including the establishment of objectives that lead to the minimization and elimination to the extent practicable of the adverse effects on human health and the environment caused by Ship Recycling; a system for ensuring implementation of the requirements set out in this Convention, the achievement of the goals set out in the policy of the Recycling Company, and the continuous improvement of the procedures and standards used in the Ship Recycling operations; identification of roles and responsibilities for employers and workers when conducting Ship Recycling operations; a programme for providing appropriate information and
training of workers for the safe and environmentally sound operation of the Ship Recycling Facility; an emergency preparedness and response plan; a system for monitoring the performance of Ship Recycling; a record-keeping system showing how Ship Recycling is carried out; a system for reporting discharges, emissions, incidents and accidents causing damage, or with the potential of causing damage, to workers' safety, human health and the environment; and a system for reporting occupational diseases, accidents, injuries and other adverse effects on workers' safety and human health, taking into account guidelines developed by the Organization.

The European Union Green paper on better ship dismantling 2007 is another attempt to come up with fresh ideas on ship dismantling, in order to continue and intensify the dialogue with Member States and stakeholders and prepare the ground for future action in the context of EU policies, including the future Maritime Policy. The main purpose of this exercise is the protection of the environment and of human health; the objective is not to artificially bring back ship recycling business volumes to the EU, thus depriving countries in South Asia of a major source of revenue. On the contrary, while acknowledging the structural comparative cost advantage of such countries, the ultimate aim of the EU is to ensure that minimum environmental and health and safety standards are observed worldwide.

In principle, the transfer of end-of-life ships from industrial to developing countries is covered by international law on the shipment of waste, and the export from the European Community of vessels containing hazardous materials is banned by the EC's Waste Shipment Regulation. However, in recent years several high-profile cases of European ships going for recycling to South Asia have shown
the problems of implementing this legislation. These obvious deficiencies and the failure to provide for socially and environmentally sustainable ship dismantling have alerted the international public and created political momentum. The International Maritime Organisation - IMO - has started to work on an international convention for the safe and environmentally sound recycling of ships. Some maritime countries, such as the UK, are developing national strategies for government vessels and ships flying their flag. The European Parliament and non-governmental organisations have demanded action at EU level. In its conclusions of 20 November 2006 the Council of the EU acknowledged that environmentally sound management of ship dismantling is a priority for the European Union. It stated that recent events and forecasts of tonnages to be dismantled in the near future call for urgent and appropriate action from the international community, including the EU. The Council welcomed the Commission’s intention to work towards an EU-wide strategy on ship dismantling. This strategy should strengthen the enforcement of existing Community law, recognising the specificity of the maritime world, developments taking place therein, particularly in international maritime legislation, and the final objective of reaching a globally sustainable solution. In this context, the Commission is invited to assess the need for building up sufficient ship dismantling capacity in the EU.

The Commission already set out its position in the Green Paper on Maritime Policy of June 2006. It proposed that a future EU maritime policy should support initiatives at international level to achieve binding minimum standards on ship recycling and promote the establishment of clean recycling facilities. However, the EU might also have to pursue a set of regional initiatives to account for the gaps
in the forthcoming international regime and the possible delay until it becomes effective.

India is a party to the Basel Convention which is a landmark convention framed in order to restrict toxic traders from disposing hazardous wastes in developing countries where there are no environmentally sound ways of disposing the same.\textsuperscript{23} The trans-boundary movement of hazardous wastes which occurs during the process of ship recycling is construed within the scope of the Convention. An absolute ban on exports of hazardous waste from OECD countries to non-OECD countries was adopted in 1995 as an amendment to the Basel Convention. The ban was introduced due to political concerns raised both by developing and developed countries regarding the increased amounts of hazardous waste being exported from developed countries to developing countries and then managed in an uncontrolled and risky manner. This "Basel ban" was incorporated into EU legislation in 1997 and is binding on all Member States (Articles 14 and 16 of the current Waste Shipment Regulation\textsuperscript{2}). The EU is the most important global player to have implemented the ban in domestic legislation. The USA, for example, has not ratified the Basel Convention even in its unamended form. Among the larger countries which are parties to the Convention include: China, Indonesia, Egypt and Nigeria. These countries have accepted the ban amendment, while Australia, Brazil, Canada, India, Japan, Korea and Russia have not. The EU and its Member States are promoting, together with their international partners, the ratification of the "Basel ban" which constitutes a key element for the improvement of the legal framework for international shipments of waste. India has not yet ratified this amendment as it fears to lose European ship-owners to her competitors: Pakistan

and Bangladesh. One of the reasons to bring this Basel ban is that the OECD countries feel that the non-OECD countries don't have mechanism to carry out recycling activities in an environmentally sound management way. No doubt, in order to regulate and ensure environmentally sound management of the hazardous wastes, the Government of India notified the Hazardous Wastes (Management & Handling) Rules, 1989 under the Environment (Protection) Act, 1986 and also subsequently a number of amendments and rules have been made towards this end but the implementation of these rules has been ineffective and the hazardous industries across the country have failed to follow the norms strictly and carry out the activities in an environmentally sound management way. For example, though the Government of India notified the Hazardous Wastes (Management & Handling) Rules, 1989, the ship breaking industries at Alang-Sosiya continued to operate from 1983 till 2005 without any hazardous wastes management arrangement. Over the years, several orders by the Supreme Court of India clarified the roles and responsibilities of ship breakers, concerned local and regional authorities, and shipowners (in providing Inventories of Hazardous Materials). However no national law specific to ship breaking was ever passed. There are several other laws that apply to the sector: the Factories Act, 1948; the Water Act, 1974; the Air Act, 1981; and the Environment Protection Act, 1986. Besides laws, more specific Rules were enacted to deal with the hazardous wastes present in the structure of end-of-life-ships: the Manufacture, Storage and Import of Hazardous Chemical Accident Rules, 1989; the Hazardous Waste Rules, 2002; the GMB Rules on Ship Breaking, 2006; and the Hazardous Wastes Rules, 2008. On 30 July 2012, the Supreme Court of India prohibited end-of-life ships coming from OECD countries to enter Indian territorial waters without having

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been pre-cleaned of hazardous waste, in accordance with the Basel Convention. Still, ships continued to be imported into Alang and Mumbai – with Alang claiming the title of the world’s biggest ship breaking yard. It was only after the Supreme Court directions in 1997 and 2003, environmental infrastructure at Alang-Sosiya has been set up in 2005 to manage and handle hazardous wastes generated from the ship breaking industries.

The Hong Kong Convention, however, has been criticized by many social and environmental groups, especially in the developing countries like India, Pakistan and Bangladesh and many groups in these countries appeal to their respective governments not to ratify this convention. Gopal Krishna of ToxicsWatch Alliance (TWA), a research and advocacy group functioning from New Delhi, India is of the opinion that the Hong Kong Convention on ship recycling adopted under influence of European Shipping Industry and this convention ignores environmental and occupational health concerns of workers. The increasing pressure on India and other developing countries to ratify this convention has been viewed as a pressure tactic. According to Mr. Gopal Krishna the IMO’s Hong Kong Convention Convention conflicts with the United Nations’ Basel Convention on the Trans-boundary Movements of Hazardous Wastes and Their Disposal and the Basel Ban Amendment. He further argues that communities living in the vicinity of Alang, Bhavnagar, India, Chittagong, Bangladesh and Gadani, Pakistan have been demanding that IMO’s Marine Environment Protection Committee (MEPC) must ensure decontamination of the beaches and suggest a phase out period for the industry to move away from a fragile coastal environment like beaches in order to protect the health of the local community and their ecosystem. The wrongful act of having polluted and contaminated Alang beach in an era when there was no environmental sensitivity must be undone. MEPC’s failure to
address this problem and allow status quo will defeat the very purpose for which the committee has been constituted. Protection of the marine environment of these beaches is the fundamental reason for MEPC’s existence.

Role of the Indian Supreme Court: Regulation of Hazardous Substances

The Central Pollution Control Board of Government of India has classified industries into Red, Green and Orange categories on the basis of type of pollutants they discharge and accordingly ship breaking industries are classified as Red category industries as the ship breaking activity involves dealing with hazardous substances. Section (2) of the Environment Protection Act of 1986 defines "hazardous substance" means as any substance or preparation which, by reason of its chemical or physico-chemical properties or handling, is liable to cause harm to human beings, other living creatures, plant, micro-organism, property or the environment. 25 Many studies have documented that the exposure to toxic substances may cause acute or chronic health effects. 26 Given its serious effect on human health, the Government of India has made extensive provisions to regulate toxic wastes through various rules and regulations. The Hazardous Wastes Rules of July 1989 was one such attempt in this direction which was amended again in 2002 and named as The Hazardous Wastes (Management and Handling) Rules of January 2000. This rule is applicable to designated categories of waste that are specified in the Schedules to the Rules. The Rule specifies that "environmentally sound management of hazardous wastes" means taking all steps to ensure that the hazardous wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes. Under rule 4, a person generating hazardous wastes and the operator of a

25 For more details, see Environment Protection Act of 1986, Ministry of Environment and Forest, Government of India, New Delhi
hazardous waste facility are responsible for the proper handling, storage and disposal of wastes. The Rules prescribe a permit system administered by State Pollution Control Boards for the handling and disposals of hazardous wastes. It prescribes that no person without board authorisation may collect, receive, treat, transport, store or dispose of hazardous wastes. The Rules also provide for the packaging, labelling and transport of hazardous wastes and require state governments to compile and publish an inventory of hazardous waste disposal sites. More importantly, Rule 11 emphasises that import of hazardous wastes from any country to India and export of hazardous wastes from India to any country for dumping or disposal shall not be permitted. However, most of the provisions prescribed under the Hazardous Wastes Rules of July 1989 were not been effectively implemented till 2000. Until January 2000, import of hazardous wastes from any country to India for recycling was not prohibited. During this period, the international trade in hazardous wastes into India for recycling purpose fell under the Basel Convention of 1989, where it was virtually exempt from controls.

It was the Indian Supreme Court which tried to strengthen import barriers. On 5 May 1997, the Supreme Court banned the import of hazardous wastes from any country into India as an interim measure in a writ petition filed by the Research Foundation for Science, Technology and Natural Resources Policy. On 4 August 1997, the court noted that despite the lapse of several years, the concerned authorities had not taken effective steps for implementing Hazardous Wastes Rules of July 1989. In such situations, the Court observed that 'we are left with the impression that even now all the authorities do not appear to appreciate the gravity of the situation and the need for prompt measures being taken to prevent serious adverse consequences if the problem is not tackled immediately'. In October 1997, the court constituted a committee with a charter to examine in
depth all matters relating to hazardous waste and to give their report and recommendations at an early date.

While the MoEF recognises that the ship breaking is a huge industry in the country but at the same time is of the opinion that there must be strong regulation to control the use and management of hazardous wastes generated from the ship breaking activities. Responding to the Court directions, the MoEF constituted a High Powered Committee (HPC) consisting of 12 experts under the Chairmanship of Prof. M G K Menon to recommend on decontamination of ships before they are exported to India for breaking. The HPC made a number of recommendations with regard to ship breaking activities which have been accepted by the Supreme Court for the implementation by the concerned authorities. In December 1997, the committee was also requested to examine the quantities and the nature of the hazardous waste stock lying at docks and ports and recommend a mechanism for the safe disposal of these wastes or re-export to the places of origin. The committee found containers holding hazardous wastes at Delhi and Bombay. Pending the recommendations of the committee, the customs authorities were restrained from releasing the goods until further orders by the court. On 10 December 1999, the court permitted the disposal of hazardous wastes that were lying at the ports, in accordance with the recommendations of the committee. The Central Pollution Control Board was directed to oversee the disposal of the imported wastes to industries that operated proper storage, processing and disposal facilities.

The general issue of control and management of hazardous waste has been addressed through environmental litigation in the Supreme Court in writ petition
no. 657 of year 1995 between Research Foundation for Science Technology National Resource Policy and Union of India and others. In delivering a number of orders and directions, the Supreme Court has been constantly monitoring this case on regular basis. One of the most important order by the Supreme Court was given on 14th October, 2003 in which the Supreme Court directed the Ministry of Environment and Forest, and Ministry of Steel to set up an Inter-Ministerial Committee (IMC) to monitor the activities of ship breaking industries in the country and to ensure that the directions of the Supreme Court are implemented by all concerned authorities. Accordingly, the Ministry of Steel set up an Inter-Ministerial Committee on 12 January 2004 under the Chairmanship of Additional Secretary and FA with members of Ministry of Shipping, Ministry of Environment and Forests (MOEF), Ministry of Labour, Gujarat Maritime Board (GMB), Central Pollution Control Board, Indian Steel Scrap and Ship breakers Association of India (ISSSAI), Mumbai Port Trust, Kolkata Port Trust etc. for the implementation of Supreme Court Orders and other related functions. The Inter-Ministerial Committee has been regularly meeting to address issues pertaining to ship breaking industries at Alang-Sosiya. As of April 2014, the IMC has held 16 meetings starting from 5th February 2004 to 1st October 2013.

In hearing the environmental litigation, the Supreme Court also directed the Ministry of Environment and Forests on 17th February 2006 to set up a Committee of Technical Experts on ship-breaking. The MoEF has set up a Technical Experts Committee on 24th March 2006 under the leadership of MoEF Secretary Mr. Pradipto Ghosh and experts from various other Organizations. The Committee made various recommendations indicating the elaborate procedure of ship-breaking which have been accepted by the Supreme Court vide its judgement dated 6-9-07. The Supreme Court vide its judgement dated 6-9-07 has stated that
the Government of India shall formulate a comprehensive Code incorporating the recommendations of the Technical Experts Committee and the same has to be operative until the concerned status are amended to be made in line with the recommendations. Accordingly, the Ministry of Steel prepared a Steel Code in the year 2010 titled as "Code on Regulations for Safe and Environmentally Sound Ship Recycling".

Even the Supreme Court took note of the happenings in Alang. It was on the directive of the court that the inter-ministerial committee was set up. In July 2012, the court banned import of all hazardous and toxic waste under the Basel convention. The ban should have rectified some of the things wrong at Alang, but hasn't.

Over the past decade, the Supreme Court has come up with several rulings about toxic waste. In July 2007, it had put in place a platter of guidelines for shipbreakers in importing, beaching and breaking ships. Those guidelines require a shipbreaker to submit in advance a dismantling plan, giving ship details, an assessment of hazardous/toxic stuff on board, the equipment he has to handle these and to protect workers, how oil and hazardous materials are to be removed. He also needs to obtain a “gas-free and fit-for-hot-works” certificate from the department of explosives. The plan also must identify and mark of all ‘non-breathable’ space in the ship. “If the court order were to be obeyed, Alang would have to shut down,” says one member of the Alang shipbreakers’ lobby, the Ship Recycling Industries Association India. In the same order, the court accepted the recommendations of a committee of which the then environment secretary Prodipto Ghosh was the head. The order specified 18 aspects of ship beaching, breaking and waste disposal. The order prescribed prior decontamination of a
ship by its owner - a job to be overseen by the state pollution control board concerned. Burning of any material, hazardous or otherwise, as a way of disposal was banned. In pursuance to the Supreme Court order\textsuperscript{27}, the Ministry of Steel issued a code in 2010 which aims at addressing the core issues of the ship-breaking industry.

**Steel Code 2010**

The main objective of framing this code was to ensure and promote safe and environmentally sound ship breaking activity and take measures to ensure appropriate safety levels for the workers involved in the ship breaking industry. The Code is also applicable to all ship recycling activities in India. The concerned Port Authority/State Maritime Board or the concerned Department of the State Government, shall be the authority for granting permissions under this Code for the Ship Recycling yard/plots under the control of the concerned Port Authority/State Maritime Board or the concerned Department of the State Government and the authorization for carrying out the ship recycling activities; provided that any permission granted under this Code shall not be exempt from any provisions of the Factories Act, 1948 and other applicable Laws and Acts.\textsuperscript{28}

However, the Ministry of Shipping, Government of India and the respective Port Authorities/State Maritime Boards or the concerned Department of the State Government reserve the right to give specific exemptions for undertaking recycling/breaking of ships grounded at any other sea front other than a recognized ship recycling plot or yard. These regulations do not apply to the


\textsuperscript{28}In case of Ship Breaking industry at Alang-Sosiya, the Gujarat Maritime Board is the nodal agency for granting permissions under this Code for the Ship Recycling plots whereas the Port Authority is the nodal agency in case of Ship Breaking industries at Darukhana in Mumbai.
ships, which are grounded and defined as wreck. For removal of the wreck, rules under the Merchant Shipping Act, 1958 shall apply. The Ministry of Steel will oversee implementation of the Code on Ship Recycling Regulations and be responsible for its amendments and updating as and when the Ministry feels it necessary.

The Supreme Court has also appointed a monitoring committee to implement its directions with reference to ship breaking industries. However, the recommendations made by the HPC have been opposed by the ship breaking units as they find these recommendations anti-ship breaking at Alang-Sosiya. There have been several government recommendations and Supreme Court orders so as to enhance the welfare of the workers at Alang, namely the provision of housing and sanitation, establishment of trust hospital, a radiological study of works, insurance and working scheme for the workers. However, a plethora of laws and Supreme Court directions have not addressed the impact of hazardous industries on workers’ health and safety issues completely.

While the regulatory authority in Gujarat claims that the environmental implications of the ship breaking industries are regulated as per the environmental norms and standards, a number of studies carried out at Alang-Sosiya suggest that the current environmental infrastructure facilities are not effective. There are claims and counter-claims by the environmental groups and implementing agencies in Gujarat as far as the environmental implication of ship breaking activities at Alang-Sosiya is concerned. The implementing agencies including Gujarat Maritime Board and the State Pollution Control Board argue that a number of steps like effluent treatment plant, solid and hazardous waste

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29 Inter-Ministerial Committee on Ship-breaking, Minutes of the 15th Committee Meeting 2 to 6 (October 18th, 2012, Gandhinagar, Gujarat).
management system, regular monitoring of the activities through surprise visit, and penalty for non-compliance with environmental norms and laws have been taken to reduce the environmental impact of ship breaking activity. The environmental groups, on the other hand, are of the opinion that these interventions are symbolic and not effective. Notwithstanding the claims of the State Government of Gujarat about the measures for environmental protection at Alang, a number of studies have documented how ship breaking activities at Alang-Sosiya have impacted local environment. It is a well-known fact that ship breaking is hazardous to environment as it contains toxic materials which are harmful to the biodiversities of the marine life and ecology. The chemical substances it contains also contaminate air and surface water which ultimately have a broader adverse impact on the ecosystems. The vessels that goes for breaking or dismantling contain materials like polychlorinated biphenyl (PCB), polyaromatic hydrocarbons (PAH), organotins like tributyl tin (TBT), polyvinyl chloride (PVC) which can produce toxic fumes on burning, tin, lead, heavy metals and various others substances such as sulphuric acid, halogens, and asbestos.

From 1983-2003, in Alang-Sosiya yards the waste materials of the vessels during the breaking accumulate over the soil and to sea waters through tidal and sub-tidal zones, deep sea and their respective sediments and to a great extent affected the ecosystems at Alang-Sosiya. A number of studies carried out in 1990s found that due to ship breaking activities mangroves disappeared many years ago, soon after the industry began. The sea off ASBY has very biological production potential with very low phytoplankton pigment concentration, low zooplankton standing stock, very poor macrobenthic standing stock and low numeric

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20Personal interaction with environmental groups and staff members of Gujarat State Pollution Control Board and Gujarat Maritime Board between May 2013-May 2014.

31Inventory of hazardous waste on end – of – life – vessels, Greenpeace, 2001

abundance of fish eggs and larvae (Soni, 1997; Majumdar, 1997). Exotic species might have been carried in with ballast water, which represents a serious biological risk. The population and diversity of fish have decreased and species tolerant to petroleum hydrocarbons seem to have adapted better to the environmental stress (Mandal, 2004). This, in turn, has also affected the livelihood of around 100 fishing households who were dependent on fishing activity at Alang-Sosiya for their livelihood. The study carried out by Greenpeace in 1998 at Alang-Sosiya reports the appalling worker conditions and mass environmental pollution, workers were routinely having to remove carcinogenic asbestos with their bare hands; toxic materials was being dumped in the sea or on nearby agricultural land; workers were seen torch – cutting ship steel into small pieces and inhaling the toxic fumes of lead paints. The ship-breaking activities or occupation is considered to be dangerous, unsafe and hazardous as it may affect the workers and the environment. The removal of these containments requires expensive, heavy regulated and time consuming processes aimed at preventing workers exposure and minimizing risks to the environment. The current process of ship breaking in the developing countries on beaches is very dangerous and would cause harm to coastal environment.

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33 The Gujrat State Pollution Control Board staffs, however, reject these findings and argue that at Alang-Sosiya sea there was never mangroves and also there is no impact of marine biology due to ship breaking yard.

34 This inference was based on my discussion with Bhagat Bhai and Manu Bhai, fishing community members living at Alang-Sosiya on 31st August 2013.
The following Table 2 gives a detailed description of year-wise hazardous wastes generated from the ship breaking industries at Alang-Sosiya:

<table>
<thead>
<tr>
<th>Year</th>
<th>No of ship</th>
<th>LDT</th>
<th>Hazardous Waste Generation in MT</th>
<th>Kg waste/LDT of ship</th>
<th>% of Waste to the weight of the ship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>136</td>
<td>760800</td>
<td>1032.86</td>
<td>1.357</td>
<td>0.13%</td>
</tr>
<tr>
<td>007-08</td>
<td>136</td>
<td>643437</td>
<td>2017.025</td>
<td>3.134</td>
<td>0.31%</td>
</tr>
<tr>
<td>2008-09</td>
<td>264</td>
<td>1944162</td>
<td>5027.84</td>
<td>2.586</td>
<td>0.25 %</td>
</tr>
<tr>
<td>2009-10</td>
<td>348</td>
<td>2937802</td>
<td>5418.04</td>
<td>1.844</td>
<td>0.18 %</td>
</tr>
<tr>
<td>2010-11</td>
<td>357</td>
<td>2816236</td>
<td>8215.31</td>
<td>2.917</td>
<td>0.29 %</td>
</tr>
<tr>
<td>2011-12</td>
<td>415</td>
<td>3847000</td>
<td>8318.980</td>
<td>2.162</td>
<td>0.22 %</td>
</tr>
<tr>
<td>2012-13</td>
<td>394</td>
<td>3847566</td>
<td>10555.55</td>
<td>2.743</td>
<td>0.27 %</td>
</tr>
<tr>
<td>2013-14</td>
<td>298</td>
<td>3059891</td>
<td>7505.890</td>
<td>2.451</td>
<td>0.24%</td>
</tr>
</tbody>
</table>

The following Table 3 gives a detailed description of year-wise solid wastes generated from the ship breaking industries at Alang-Sosiya:

<table>
<thead>
<tr>
<th>Year</th>
<th>No of ship</th>
<th>LDT</th>
<th>Solid Waste generation in MT</th>
<th>Kg waste/LDT of ship</th>
<th>% of Waste to the weight of the ship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>136</td>
<td>760800</td>
<td>46.205</td>
<td>0.061</td>
<td>0.006</td>
</tr>
<tr>
<td>007-08</td>
<td>136</td>
<td>643437</td>
<td>828.425</td>
<td>0.129</td>
<td>0.129</td>
</tr>
<tr>
<td>2008-09</td>
<td>264</td>
<td>1944162</td>
<td>855.265</td>
<td>0.044</td>
<td>0.044</td>
</tr>
<tr>
<td>2009-10</td>
<td>348</td>
<td>2937802</td>
<td>726.175</td>
<td>0.025</td>
<td>0.025</td>
</tr>
<tr>
<td>2010-11</td>
<td>357</td>
<td>2816236</td>
<td>729.100</td>
<td>0.026</td>
<td>0.026</td>
</tr>
<tr>
<td>2011-12</td>
<td>415</td>
<td>3847000</td>
<td>552.430</td>
<td>0.014</td>
<td>0.014</td>
</tr>
<tr>
<td>2012-13</td>
<td>394</td>
<td>3847566</td>
<td>770.550</td>
<td>0.020</td>
<td>0.020</td>
</tr>
<tr>
<td>2013-14</td>
<td>298</td>
<td>3059891</td>
<td>889.025</td>
<td>0.029</td>
<td>0.029</td>
</tr>
</tbody>
</table>

Source: Gujarat Maritime Board, May 2014
The UN Special Rapporteur's assessment report argues that “in India ships are dismantled on beaches, a method commonly referred to as “beaching”. This method of ship dismantling fails to comply with generally accepted norms and standards on environmental protection. Although very little work has been carried out to assess its environmental impact, the dismantling of ships on sandy beaches without any containment other than the hull of the ship itself appears to have caused high levels of contamination of soil, air, and marine and freshwater resources in many South Asian countries, and to have adversely affected the livelihood of local communities surrounding the ship breaking facilities, which often rely on agriculture and fishing for their subsistence. So, like the other industrial activities, ship breaking activities result in significant environmental impacts like the coastal and ocean biodiversity. Asbestos which is used for both insulation and as a fire resistant material causes the formation of scar – like tissue in the lungs, resulting in permanent breathing difficulties and in the long term cancer of the thin membrane around the lungs of the workers.\textsuperscript{55} There are cases of in the villages of Alang-Sosiya when people report of oxen and cattle died because of eating the dumping waste from the dismantled boats. The villagers reports respiratory and skin problems particularly when the waste is set on fire. Most of the villagers’ suffer from water scarcity and salinity. A numbers of wells are so polluted that they have been abandoned”.\textsuperscript{36} The staff members of Gujarat Government, however, refuted the charges made by the environmental groups and studies done by independent groups and scholars and argued that these studies and data are collected long back but there is no recent study that finds the adverse environmental impact of ship breaking industries.


\textsuperscript{51} Demaria, F (2010), “Ship breaking at Alang-Sosiya (India): An ecological distribution conflict”.
Major Challenges for Workers Rights in the Ship Breaking Industries

This section outlines the major challenges for the workers' rights at Alang-Sosiya ship breaking yard.

Non-Implementation of Occupational Health and Safety Legislations

Section 11 to 20 of Chapter III of the Factories Act of 1948 has laid down provisions for the general health of the workers by prescribing details about cleanliness, disposal of wastes and effluents, ventilation and temperature, dust and fume, artificial humidification, over crowding, lighting, drinking water, latrines and urinals and spittoons. Section 21 to 40 A of Chapter IV of the Act provides for the safety of the employees by laying down specifications for fencing of machinery work on or near machinery in motion, employment of young persons on dangerous machines, striking gear and devices for cutting off power, prohibition of employment of women and children near cotton opening, hoists, lifts, chains, ropes, revolving machines and any other hazardous operations. It also provides laws for providing protection of eyes, protection against fumes, explosives and inflammable gas; precaution against fire, standard safety specification for building, machinery are also mentioned in the Act. Section 41A to 41H of Chapter IVA of the Factories Act emphasizes the setting up of Site Appraisal Committees before clearance given to hazardous industries. Chapter V from Section 42 to 50 lays down provisions for basic facilities in the work place including washing facilities, facilities for storing and drying clothes, facilities for sitting, shelters, rest rooms, lunch rooms and canteen. Chapter IX of the Act empowers the state government to declare a manufacturing process as dangerous operation. Any dangerous manufacturing process has to take up extra precaution for safety like periodical medical check ups, prohibition of employment of women.

37 For more details, see The Factories Act 1948, Ministry of Labour & Employment, Government of India, New Delhi
and children. It also makes mandatory for the employer/owner to employ a safety officer to periodically assess the hazard and to remove the condition of dangerous operations. The Chief Inspector of factories has the highest authority to inspect and recommend the safety and health measures. To check the violation of any provision of the Act, an inspector may take samples of substance used in the factory. He can also take up safety and occupational health surveys. The most recent amendments identify hazardous processes. These amendments give certain rights to the workers and the citizens around the factories. Both the sections now have the right to information about hazardous processes. Earlier the reports of medical check ups of workers were the property of the management. Now the workers have a right to get the medical report. There is a duty cast on the manufacturers of supplying information about hazardous. The employers have to develop a safety policy and form safety committees. The workers are given a guarantee that about any complaint they lodge with the factory inspector, identity of the worker won't be disclosed. The major lacuna in these rights is if violated they don’t give any right to the workers for seeking remedies. The Factory Inspectorate is the only authority which can seek legal action against the erring employers. The rules under this Act are framed by the State Governments separately. These provisions under the Factories Act have not been strictly implemented and no concrete action has been taken against the industries for non-compliance with the norms laid down under this act. The increasing number of fatal and non-fatal accidents and deaths at Alang-Sosiya ship breaking yard clearly points out that the state machinery has completely failed in protecting and improving workers' living and working conditions. As a result, the Ship breaking Industry has been receiving a lot of adverse publicity in the national and international media due to the large number of accidents and deaths of workers over the years. “Since 1983, over 400 fires have broken out and around 470
workers have died. Gopal Krishna, environmental and social activist, however, argue that reporting on workers' death is poor and the real figure would have been closer to 2,000. The following Table: 4 shows the number of deaths related to ship breaking activity at Alang-Sosiya Ship Breaking Yard from 1983-2013:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>0</td>
</tr>
<tr>
<td>1984</td>
<td>15</td>
</tr>
<tr>
<td>1985</td>
<td>5</td>
</tr>
<tr>
<td>1986</td>
<td>13</td>
</tr>
<tr>
<td>1987</td>
<td>7</td>
</tr>
<tr>
<td>1988</td>
<td>2</td>
</tr>
<tr>
<td>1989</td>
<td>12</td>
</tr>
<tr>
<td>1990</td>
<td>8</td>
</tr>
<tr>
<td>1991</td>
<td>10</td>
</tr>
<tr>
<td>1992</td>
<td>12</td>
</tr>
<tr>
<td>1993</td>
<td>16</td>
</tr>
<tr>
<td>1994</td>
<td>28</td>
</tr>
<tr>
<td>1995</td>
<td>29</td>
</tr>
<tr>
<td>1996</td>
<td>28</td>
</tr>
<tr>
<td>1997</td>
<td>51</td>
</tr>
<tr>
<td>1998</td>
<td>27</td>
</tr>
<tr>
<td>1999</td>
<td>29</td>
</tr>
<tr>
<td>2000</td>
<td>27</td>
</tr>
<tr>
<td>2001</td>
<td>8</td>
</tr>
<tr>
<td>2002</td>
<td>19</td>
</tr>
<tr>
<td>2003</td>
<td>25</td>
</tr>
<tr>
<td>2004</td>
<td>5</td>
</tr>
<tr>
<td>2005</td>
<td>4</td>
</tr>
<tr>
<td>2006</td>
<td>5</td>
</tr>
<tr>
<td>2007</td>
<td>6</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>14</td>
</tr>
<tr>
<td>2010</td>
<td>21</td>
</tr>
<tr>
<td>2011</td>
<td>7</td>
</tr>
<tr>
<td>2012</td>
<td>17</td>
</tr>
<tr>
<td>2013</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>470</td>
</tr>
</tbody>
</table>

Source: Information obtained through RTI from the Gujarat State Industrial Safety & Health Department, Ahmedabad on 15.05.2014
Photo 3: Workers at Alang-Sosiya Ship Breaking Yard cutting the ship from above without any safety belt.

In this connection, it is also important to mention here findings of the Final Report of the Hon'ble Supreme court appointed Technical Experts Committee (TEC). The report reveals the situation faced by these workers is very pathetic. With regard to accidents, the Final Report notes that "the average annual incidence of fatal accidents in the ship breaking industry is 2.0 per 1000 workers while the all India incidence of fatal accidents during the same period in the mining industry, which is considered to be the most accident-prone industry, is 0.34 per 1000 workers." These revealed facts are the first official confirmation of
Alang's longstanding notoriety as a hazardous and unsafe place to work.\textsuperscript{38} Gujarat-based National Institute of Occupational Health (NIOH) carried out X-rays on 94 workers and found that 15 of them could be suffering from very early stages of asbestos poisoning. We have prescribed more tests to confirm their status.\textsuperscript{39}

Also, fatal accidents continue to happen due to the hazardous nature of the ship-breaking work, which involves cutting open chunks of steel and iron using blow-torches and the presence of heavy industrial machinery. Though there are rules and regulations for carrying out inspection in the ship breaking yard under various labour and environmental laws, the safety measures in cutting the ships in the yard-side continue to be ineffective. Many studies have documented that low-pressure gas cylinders are always kept at every yard in a haphazard manner for cutting a ship's body. When a new ship is beached, at least 100 gas cylinders are taken inside the ship. Before reaching the yard, these ships carry hydrocarbons such as diesel, furnace oil and lubricating oil that are required to operate the ship till the beaching is completed.\textsuperscript{40}

Workers' health and safety concerns are not given adequate attention by the companies and the concern authority and the violation of the civil and labour rights of these workers is common\textsuperscript{41}. The inquiries in accident related deaths and

\textsuperscript{38} For more details, see the National Institute of Occupational Health Annual Report 2006-07, Ahmedabad

\textsuperscript{39} Sonu Jain, (2006), "It's official: Asbestos is crippling Alang workers", Indian Express reports on 5\textsuperscript{th} September.


\textsuperscript{41} See Rupa Abdi (2003), India's Ship-Scraping Industry: Monument to the Abuse of Human Labour and the Environment, IIAS News letter, 32, November
Injuries are never made public. No doubt, prosecution against the employers has been initiated but there has been no conviction of employers in violating various labour laws which led to death of workers. The following Table 5 gives year-wise number of prosecutions, status of prosecutions and number of plots closed due to violation of various labour laws since 1983 to 2013:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Deaths</th>
<th>No. of Prosecutions</th>
<th>Status of Prosecution</th>
<th>Closure of number of Industries under section 40 (2) of Factory Act 1948</th>
<th>Number of days closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>0</td>
<td>0</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1984</td>
<td>15</td>
<td>54</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1985</td>
<td>5</td>
<td>9</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1986</td>
<td>13</td>
<td>76</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1987</td>
<td>7</td>
<td>25</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1988</td>
<td>2</td>
<td>3</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>12</td>
<td>6</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1990</td>
<td>8</td>
<td>1</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1991</td>
<td>10</td>
<td>7</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1992</td>
<td>12</td>
<td>3</td>
<td>Not decided</td>
<td>0</td>
<td>0</td>
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<td>10</td>
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<td>36</td>
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Source: Information obtained through RTI from the Gujarat State Industrial Safety & Health Department, Ahmadabad on 15.05.2014

The lack of effective implementation of labour and environmental laws in ship breaking industries both by the Central and State Government of Gujarat illustrates this point. As it is observed in many studies that the ship breaking industries provide ready made employment to unskilled hands, high quality steel that helps conserve energy while reducing the need for the mining of more of the ore and revenues to the government. There are about 95% valuable steel recovered from these ships which contribute significantly to India's development activity. However, the cost of upholding environmental and health and safety standards are huge. The Ship breaking at Alang-Sosiya violates numerous national and international regulations related to pollution, hazardous wastes, and labour rights. The industry has been established on the sweat and blood of migrant labourers and it has grown to be the world's biggest ship breaking yard but the outrageous abuse of human labour and environment is very much alarming as over times it has been observed that the economic profit gains precedence over environmental health and labour rights.

One of the most important requirements for the workers engaged in ship breaking activities is safety equipments. Various labour laws including the Factory Act of 1948.

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1948 and Gujarat Factoy Act (Rules) of 1963 make it mandatory that the employers should ensure the availability of safety equipments to workers. Similarly, the International Labour Organisation guidelines of 2003 outlined a detailed provisions for the safety and health of workers in ship breaking industries. The ILO Guidelines are the first of their kind to provide guidance to ensure safe work in ship breaking within the framework of the ILO's Decent Work Agenda. In so doing they provide advice on the transformation of a mainly informal sector activity into a more formal organized one. These Guidelines are designed to assist ship breakers and competent authorities alike to implement the relevant provisions of ILO standards, codes of practice and other guidelines on occupational safety and health and working conditions, and the provisions of instruments of other relevant international organizations, aiming at progressive improvement. The practical recommendations in these Guidelines are for use by all those who are responsible for occupational safety and health in ship breaking operations. The Guidelines are not legally binding, nor are they intended to replace national laws, regulations or accepted standards. They provide guidance to those engaged in the framing of relevant provisions and the setting up of effective national systems, procedures and enterprise regulations, where they do not exist. The practical use of these Guidelines will largely depend on local circumstances, the availability of financial resources, scale of operations and technical possibilities. The ILO guidelines clearly specify to protect ship-breaking workers from workplace hazards and to the elimination and control of work-related injuries and diseases, ill health, and incidents; and also to assist and facilitate in the effective management of occupational safety and health issues in or about the workplace. The Guidelines contain elements from the ILO Guidelines on occupational safety and health management systems (ILO-OSH 2001) in the hope they will serve as a practical tool for competent national authorities and ship
breaking facilities to achieve continual improvements in occupational safety and health performance.

Despite so many efforts and dialogues between the Government of India and environmental and trade unions in India and also orders given by the Supreme Court of India, there has been no significant development to formulate a national occupation safety and health policy. While in theory the Government of India accepts the ILO guidelines but in practice these guidelines are not strictly adhered to in the ship breaking industries at Alang-Sosiya. There are different types of workers engaged in different activities of ship breaking industries at Alang-Sosiya. Most of the workers are engaged in unskilled activities like loading, scrapping and handling hazardous wastes. These activities without proper safety equipments would impact the health of the workers and also would lead to injuries and deaths. The data obtained from the Gujarat Maritime Board suggests that every year there are a number of fatal and non-fatal accidents due to ship breaking activities. The following Table 6 gives information related to year-wise Fatal and Non-Fatal Accidents at Alang-Sosiya Ship Breaking Yard from 2001-2014:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Fatal Accidents</th>
<th>Number of Non-Fatal Accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>8</td>
<td>34</td>
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<td>2002-03</td>
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<td>24</td>
</tr>
<tr>
<td>Year</td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>2010-11</td>
<td>21</td>
<td></td>
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<tr>
<td>2011-12</td>
<td>07</td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>2013-14</td>
<td>10</td>
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<tr>
<td>Total</td>
<td>141</td>
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</tr>
<tr>
<td></td>
<td>301</td>
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</tr>
</tbody>
</table>

Source: Gujarat Maritime Board, Government of Gujarat, May 2014

Also, the data from the Industrial Safety and Health Department suggests the number of deaths since 1983 is around 470. GMB officials believe that the ship breakers carry out operations in an unplanned and unorganized manner which leads to accidents and deaths. These accidents and deaths led to wide protest by various NGOs and civil society groups who demanded action against the ship breakers for not ensuring safety measures for working conditions of the workers at Alang. The Gujarat Maritime Board and Industrial Safety and Health Department were directed by the Court and through various government agreements at the international level to ensure the availability of safety equipments for the workers. It is now mandatory for the ship breakers to give all kinds of safety equipments to workers engaged in ship breaking activities. Majority of the workers have informed us that the safety equipments are available to them when they start working but are taken back after a few days. A number of workers pointed out that the safety equipments are given to them when there is inspection takes place by government department or any visit made by media, NGO or foreign delegates. Many workers also complained that the safety equipments are not in good condition and sometimes when you don't return the safety equipments in good condition then the employer deducts Rs. 500 from their
salary.\textsuperscript{43} There is no significant impact as far as addressing regular accidents, injuries and deaths despite so many interventions.

In the work place, due to the intense humidity and heat, the worker experience considerable difficulties in using the substandard protective gears such as protective clothing. Most of the work is done with bare hands, sledge – hammers, crowbars, flashlights and gas torches. As the workers are generally consists of the migrants labourers, who come to find works in the search of earning livelihood or just to earn their bread are ready to work any condition and due to their compelled situations they have no choice but to choose whatever work they get and to such an extent that they don't hesitate to work even in the face of death. So, the supply of labour is immense to this industry and it emerges more or less as a replaceable commodity, less human and the basic guarantees of life and dignity are not for him. This is so because, even if one worker is lost, there are thousands willing to take his place (Tony George Puthucherril, 2011).

\textsuperscript{43} This information was shared by the workers during the NHRC team’s visit to Alang-Sosiya Ship Breaking Yard on 26th May 2014.
Photo 4 & 5: The front side of the card gives information about the workers and the number of days worked in a month and the backside of the card shows that the worker is not provided basic safety measures except helmet.
Table 7: Inspections done by the industrial safety and health officer to the Alang, and Sosiya ship breaking yard from 2008 to 2013

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Year</th>
<th>Number of Inspection</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2008</td>
<td>107</td>
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<tr>
<td>2</td>
<td>2009</td>
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<td>2012</td>
<td>80</td>
</tr>
<tr>
<td>6</td>
<td>2013</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: Information Obtained through RTI from the Industrial Safety and Health Department, Government of Gujarat on 21st January 2014

Photo 6: Workers handling wastes without hand gloves at Alang-Sosiya Ship Breaking Yard
Strong Lobby of Ship Recycling Association of India

Ship Recycling Industries Association India (SRIA) is a powerful and well-connected association of Ship Recyclers in India and has been active in Alang/Sosiya, Bhavnagar, Gujarat since August 1983. The main objective of this association has been to protect the interests and rights of the Ship Recyclers and work towards the welfare of ship recycling activity in India and ensure safe and eco-friendly recycling activity. This association has been very active not only in representing the interests of the Ship Recyclers in various government departments and court of law but also quite influential in political circle. The association meets every Wednesday to discuss major issues related to ship breaking activity and works out plan and strategies to address any problems faced by its members. Each ship breaking unit contributes Rs. 25,000 as lifetime membership fees and also Rs. 1 for every ton that it scraps in its yard. In every three years the association selects its President and Secretary and other office bearers through internal election procedures. The strategies and resources used by the association not only protected its members but also helped the industry to sustain and develop into the largest ship recycling yard in the world.

The members of ship breaking association also claim that the association has been working to ensure that adequate safety standards are followed by the member units, to arrange for training programs to enhance the ability of the workers, to conduct medical checkups and various campaigns for the welfare of the industry, to help the members to comply with various rules and regulations, to ensure that the ship recycling activity is carried out in an eco-friendly manner, to provide requisite information to the members, to ensure that the industry remains committed to have continual improvement in safety and environmental
standarads. In addition to this, the SRIA also claims that it extends financial assistance for the facilities and equipments of Red Cross hospital at Alang, provides fully equipped mobile hospital and ambulance to handle emergencies, and free medical check-up for workers and their family members, arranges regular medical camps for diagnosis and treatment of workers at the yard, conducts regular safety training programs and audio-visual training to the workers, and also safety audit is conducted jointly by GMB and SRIA on a regular basis.

A detailed analysis of working and living conditions of workers and examination of various government department reports, however, reveals a contrasting picture about the role and activities of SRIA at Alang-Sosiya ship breaking yard. Most of the claims, particularly, its efforts to ensure adequate safety standards for workers at yard site is a complete myth and the reality has been that accidents and death of workers takes place ever since the industry started at Alang-Sosiya. Instead of addressing this issue seriously, the association has been rather very protective of its members' interests. For example, on October 6, 2012, as the ship Union Brave was being dismantled at the Alang ship breaking yard's Plot Number 82 on Gujarat's coast, a fire broke out on the half-broken tanker and six migrant workers from Uttar Pradesh died and several workers were injured. As the news spread out and workers protested, three ship-breakers were arrested and booked for culpable homicide on the night of October 11, 2012. The arrested include owners of Kiran Ship Breaking Company, Ram Krishna Jain and Vipin Jain along with manager of the firm Rajesh Chandra Kailash Chandra. They have been booked under Sections 304, 338, 114 and 285 of Indian Penal Code. Also, the license of Charter Engineer, G P Rajeguru who gave 'Safe for Man Entry Certificate' has been

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44 Information obtained from members of SRIA and for more details about SRIA, see this link: http://www.sriaindia.com/
cancelled due to the matter of deaths in Plot No. 82 on Alang beach. However, the arrest of the shipbreaker and two others were strongly protested by the SRIA and this led to a shutdown of the entire yard for five days in protest. It is also found that the ship breakers association met Mr. Maninder Singh Pawar, Superintendent of Police, Bhavnagar District on October 12, 2012 to get Section 304 removed from the FIR against the arrested ship breakers who were trying to escape police action citing medical reasons. Clearly, if the fire and the deaths did take place, rules were being flouted with impunity at Alang and the oversight task was not performed very well. Instead of accepting this as a fundamental flaw on the part of ship breaker, the association had gone to the extent of supporting the ship breaker. Also, there is no provision or code of conduct guidelines accepted by the SRIA that if the members of association fail to take adequate safety measures or not follow labour and environment laws then the ship breakers shall be punished or penalised or shall not be allowed to be members of the association. In its last 30 years of history, not a single industrial unit member of the association owning a plot at Alang-Sosiya has been convicted for various fatal and non-fatal accidents and death of 470 workers since 1983 nor has the association taken suo motu action against any member of the association for violating labour and environment laws.

Likewise, the association claims that it is interested in sustainable ship breaking activity but it has opposed and expressed its strong reservation on the recently introduced GMB Ship Recycling Policy of 2006 aimed at protecting and improving working conditions and ensuring adequate preventing measures for

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4For more details, see Gopal Krishna's letter to the Chairperson Inter-Ministerial Committee (IMC) on 12th October 2012 "Seeking relief for recent cruel death of Alang workers, Shipbreakers arrest ahead of IMC visit to Alang beach". Also, available at this link: http://www.toxicswatch.org/2012/10/seeking-relief-for-recent-cruel-death.html?m=0
environmental protection. The association viewed this Ship building Policy by the GMB as unjust, unconstitutional and shall be a death sentence for the Industry. Similarly, the association views the setting up of Inter-Ministerial Committee to monitor ship breaking activity at Alang-Sosiya as a kind of obstacle for the industrial growth and also views the recently introduced Steel Code of 2013 as anti-industrial policy.

The industrial association members have been arguing that the Gujarat Maritime Board and Labour & Employment Department have not addressed major issues like hospital facility for workers and providing drinking water and sanitation facility to workers. The members further raised the point that they have been paying water fees and also have paid insurance premium for the workers but the water distribution done by the GMB is not effective and adequate and also the Employee's State Insurance Corporation of Gujarat is not settling the pending claims of workers' who were either injured or died in the ship breaking yard.46 Similarly, the members of SRIA also argued that the GMB has not made any serious efforts to improve the conditions of the plots which are congested and small and not sufficient to carry out ship breaking operations smoothly, with congestion often causing accidents. The GMB officials, however, pointed out that the ship breakers carry out operations in an unplanned and unorganized manner which leads to accidents. It is also pointed out by one GMB officer who doesn't want to be quoted here that in the ship breaking yard there is no strict implementation of labour laws and safety concerns. Labour laws are not implemented and labourers are often not provided with safety facilities or working equipment such as helmets, gumboots, etc. In the cases where these are

46 This information was shared by the members of the SRIA during the visit of the National Human Rights Commission (NHRC), New Delhi to Alang-Sosiya Ship Breaking Yard on 25-26 May 2014
provided, there are insufficient numbers and they are of poor quality, except at the time of inspection or safety audit. The labourers are not provided with the necessary equipment for machine safety, chemical safety and water safety. This concern was also expressed by the workers during the visit of the NHRC team to the ship breaking yard on 25-26 May 2014.

The members of the ship breaking association, however, try to downplay these allegations and argue that there are a few NGOs and individuals engaged in adverse campaign against the ship breaking industrial units both at the national and international level and the national and international policy making bodies without consulting the ship yard owners have responded to these adverse publicity against the ship breaking units by framing rules and regulations to secure safety and environmental protection in ship scrapping activities.47

In sum, it can be argued that the activity of SRIA has been sceptical and not showing a strong concern towards sustainable ship breaking activity. No doubt, it has contributed to the infrastructure required at the Alang-Sosiya ship yard in many ways such as contribution to housing facilities for the workers, fees for various infrastructure development in the area like road and street lights, conducts medical camps, provides ambulance for workers’ health, contributed to build the hospital, etc.,. But an analysis of its overall activities suggest that the association has been largely driven by business interest at the cost of safe working and living conditions and has not shown active interest when it comes to its commitment to labour and environment laws. A number of workers during the visit of NHRC team on 25-26 May 2014 shared that the industries provide

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47 For more details, see the Minutes of the Inter-Ministerial Committee (IMC) Meeting on Ship Breaking held of 5.2.2004
personal protective equipments when inspection takes place or teams like NHRC visits and it is a symbolic activity. Some workers even had gone to the extent of complaining that we were given the personal protective equipments which are not in good conditions and also in case if we fail to return the safety equipments then the industrial management deducts Rs. 500 from our salary.

Presence of Multiple Authorities and Committees
There are a number of central and state government agencies involved in the management of ship breaking industries at Alang-Sosiya, Bhavnagar, Gujarat. These government agencies are: Gujarat Maritime Board (GMB), Labour & Employment Department of Gujarat, State Coastal Regulation Zone Authority, Gujarat State Pollution Control Board, Customs Department, Occupational Health and Safety Inspector, Factory Inspector, Ministry of Environment and Forests, Ministry of Steel, Ministry of Shipping Industries, New Delhi, etc. Also, both the High Powered Committee and Inter-Ministerial Committee appointed through the Court direction are important actors in ensuring the safety of workers and environmental protection in the ship breaking yard.

The Gujarat Maritime Board (GMB) is the nodal agency as far as the ship breaking activity at Alang-Sosiya is concerned and this agency is entrusted with the responsibility of allocating plots for ship breaking, developing the required infrastructure, acquisition of land, planning, and the provision of water, electricity, roads and communication. Till 1997, the focus was on physical infrastructure. Attention towards workers safety was initiated in the beginning of 1997 by executing a Memorandum of Understanding with the Gujarat Ship Breakers Association to keep records of accidents, establish a permanent office of factory inspectors and labour officer, initiate the issuance of identity cards to the workers,
execute detailed inquiries into total accidents, punish the plot owner in the event of an accident, and develop the constitution of an ‘Expert Committee’ to examine standard rules for the ship breaking industry. The Gujarat Maritime Board has enormous power to ensure that the ship yards follow the norms and regulations laid down under various state and central government law and policy. If any of the components of the Recycling Facility Management Plan of the Plot are not operative and not in place during the inspection by the Gujarat Maritime Board then the GMB has the power to cancel the permission of the Recycling Facility Management Plan and the ship recycler would not be permitted to beach any ship till the concerned components under the Recycling Facility Management Plan are made operative as per the requirements. A number of initiatives have been made by the GMB towards the development of ship breaking activities at Alang. However, GMB is often accused of failing to monitor Alang; never mind that it has periodically issued instructions to ship breakers.

The members of ship breaking association at Alang say that in the last three decades, GMB has collected Rs 600 crore in rents and development charges at Alang, but done nothing to provide basic amenities and infrastructure. Some fee is collected also by the ferrous scrap committee of the steel ministry. “Whatever little development is being done now is thanks to grants from this committee,” says a disgruntled ship breaker. The committee, according to SRIA, has an unspent corpus of Rs 150 crore. In the meantime, thousands of Alang workers, mostly migrant, remain at the mercy of shipbreakers.

Another important authority involved in regulating the activities in the ship breaking yard is the State Government’s Labour & Employment Department. The
government has provided a labour officer for ASSBY. The labour officer has the responsibility to look into matters of providing physical facilities, wages, implementation of labour laws, and prosecution of ship breakers in case of non-compliance. The GMB works in unison with the Department of Labour & Employment, Industrial Safety and Health Department and State Pollution Control Board of the state government of Gujarat.

Similarly, the presence of Inter-Ministerial Committee since 2004 has also not made any serious changes at the grassroots level. The IMC has met sixteen times so far but the issues related to workers' safety, housing, water and hospital have not been resolved. The members of IMC feel that the power of IMC is limited and it cannot enforce the rules and regulations. The IMC Chairman in the 15th meeting viewed that "we are lacking progress on many fronts and lack of coordination between the different agencies has been a significant problem to ensure safe ship recycling activities in the ship breaking activities. It is also important to mention here that the irregular meetings of the IMC members has not been taken seriously by the Ministry of Steel. The meetings of IMC members have become symbolic and sometimes driven by tragic accident in the ship breaking yard.\textsuperscript{48} A close look at the minutes of the all the sixteen IMC meetings from 2004-2013 suggests that IMC members have not been able to implement their recommendations as in every meeting assurance has been given by the SRIA and implementing agencies to resolve water, sanitation, housing, safety and hospital but nothing significant has been done in this direction.

\textsuperscript{48} The IMC Chairman expressed concern over the irregular meeting of IMC member in the 15th IMC meeting and also the 15th Meeting of IMC took place on 18th October 2012 soon after the tragic accident in the ship breaking yard 6th October 2012.
The above analysis of the role of regulatory authorities and committees suggest that the presence of multiple government agencies has not made a significant impact in controlling the behaviour of ship breaking industries to prevent environmental pollution and ensuring better working conditions. Workers are confused to know what exactly the role of each department is and which government agency they need to approach to address their grievances. There is no effort to educate the workers about the role and responsibility of each agency and how they can benefit from different government departments in case if there is any violation of their rights. Referring to non-compliance of various court orders and laws, Sudhir Chadha, Chairman Gujarat Maritime Board, Alang, is of the opinion that lack of coordination between different agencies has been a big problem to implement labour and environment laws effectively.\textsuperscript{49} The Supreme Court appointed Inter-Ministerial Committee also appears to be ineffective as far as the implementation of court orders are concerned. The role of Inter-Ministerial Committee has been confined to organising meetings and discussing issues and preparing report based on the issues raised by various stakeholders.\textsuperscript{50} Beyond this, it has not been able to play a significant role in bringing changes and ensuring the implementation of issues that are agreed in the Inter-Ministerial meeting. Many attribute this ineffective role of IMC to its advisory role and not any legal binding body.

\textbf{Absence of Active Trade Union}

One of the key factors in addressing and resolving workers' rights at Alang-Sosiya ship breaking industries has been the absence of an active and strong trade union to represent the interests of migrant workers. The trade unions in Gujarat have not taken active interest in mobilising workers and representing their interests

\textsuperscript{49}Interview with Sudhir Chacha, Chairman, Gujarat Maritime Board, Alang, on 1st September 2013
\textsuperscript{50}Till December 2013, 15 IMC meetings were organised from 2004-2013.
before various government departments. As mentioned earlier around 35,000 workers are actively involved in the ship breaking yard and most of them are migrant workers from the States of Uttar Pradesh, Odisha, West Bengal and Bihar. Till 2006, no trade union in Gujarat was representing the cause of ship breaking workers in decision-making and implementation process. 

"Nobody takes up our issue and we are scared to protest against the plot owners or to inform government officer about the working conditions and inadequate facilities to live here. If we protest then we will loose our job" says Mr. Hrushikesh Patro from Ganjam District of Odisha. The Alang-Sosiya Ship Recycling & General Workers' Association was formed in the year 2006. Alang-Sosiya Ship Recycling & General Workers' Association (ASSRGWA) is the first trade union in the world for the ship breaking workers. The union represents the collective voice of Alang-Sosiya ship breaking workers and has enrolled around 10,000 members. This union is an offshoot of Mumbai Port Trust Dock and General Employees' Union (MPTDGEU) and is supported by Steel, Metal & Engineering Workers Federation of India (SMERFI) and Hind Mazdoor Sabha (HMS) on national level and International Metal Workers Federation on the international level.

No doubt, with the formation of this association there has been constant pressure to address workers' demand like providing safety equipments, compensation to worker for injury or death, filing complains against plot owners for violating Factories Act of 1948, representation to various government departments, etc. One of the major concerns of workers at Alang-Sosiya ship yard is uncertainty about job security. As long as there is substantial number of ships arriving to the yard there will be continuous work for the workers, but when a situation arises whereby there are

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51 In my visit with National Human Rights Commission (NHRC) New Delhi to Alang-Sosiya on 25-26 May 2014, a number of NGOs and trade unions claimed that they have been working in this area for so many years. But in our interaction with workers we were told that no trade union or NGO has come to their rescue or represented their cause. However, workers acknowledged the presence of Alang-Sosiya Ship Recycling & General Workers' Association since 2006.
lesser ships at yards, some workers are rendered jobless and the employment of new workers will also stop automatically. With the establishment of the union, the demand for social security like Provident Fund (PF), Gratuity and other benefits for the workers under various laws have been made before the ship breaking units. Another effort of the union that needs to be highlighted here is in facilitating dependent of deceased or injured workers to get adequate compensation from employers. “The biggest challenge for the Alang-Sosiya Ship Recycling & General Workers’ Association has, however, been to mobilize workers to raise their voice consistently and demand for rights and justice if their fellow workers are thrown out of job or compensation has not been paid to workers for injuries or demanding fair wage for extra hours of work or provisions for adequate infrastructure facilities at the work place. The involvement of workers is confined to individual rights and problems but not for collective rights” says Vidhyadhar V Rane, General Secretary, Alang-Sosiya Ship Recycling & General Workers’ Association.\(^5\) For example, not all workers have taken interest in this organization. Around 37% workers don’t want to participate in the trade union activities as they feel it will backfire and might create problems for their employment opportunities. Those who participate in the trade union activities, however, confine their role to address basic issues like sanitation, water, and health but no interest has been shown by the workers to protest against major health hazards, accidents, compensation for deaths and injuries. Also, the association has not got any support either from local people and leaders or other trade union leaders from the state. The complexity of the situation arises from the fact that there exists a close nexus among the local leaders, industrial units and government department staffs, says a member of the local trade union ASSRGWA who doesn’t want to be quoted here. Every effort has been made to suppress the

\(^5\) Interview with Vidhyadhar V Rane, General Secretary, Alang-Sosiya Ship Recycling & General Workers’ Association, in December 2013, Mumbai
voice of the workers and also make sure no trade union dares to organise these workers. Workers hardly speak out on the worst working conditions as they fear to lose their jobs. The following Chart 5 shows the percentage of workers registered their name in trade union activity related to ship breaking industries at Alang-Sosiya.

![Chart 5: Trade union involvement](image)

**Local Dynamics**

There are 12 villages around Alang-Sosiya ship breaking yard which are directly or indirectly benefiting from the ship breaking activities. The local village people a few years before demanded basic provision of physical infrastructure such as roads; water and fuel supply; land use; khadas (shops selling various materials from the ships); and protested against the pollution of land, air, water and the marine environment, as well as noise pollution; solid waste disposal; and land acquisition and compensation but these demands are no longer made by the village people today and one finds there is a complete silence as far as the organisation and mobilisation of village people around these issues are concerned.
Local politicians, implementing agency members and plot owners in the ship breaking yard are working as a coalition group to thwart any pressure and government decision to provide better working conditions and prevent environmental pollution in the area. Not a single Panchayat in and around Alang-Sosiya ship breaking yard protested against environmental pollution or supported workers association to demand better working conditions. Most of the Panchayat leaders don’t see the long-term impact of the ship breaking yard on their living standards and agricultural activities rather are happy with the benefits that come to their doorstep because of ship breaking yard at Alang-Sosiya. For example, most of the workers who have migrated to Alang-Sosiya with their family members prefer to stay in nearby villages as there is no housing facility available near the ship breaking yard. Villages namely, Alang, Sosiya, and Munnar have been renting their houses to migrant workers and also local business due to presence of more than 35,000 workers is benefiting significantly and provides opportunity to local people to improve their economic conditions, says Mr. Ghanshyam Singh, Sarpanch of Alang Village.52 “If we benefit from the ship breaking yard, then why should we oppose it”, says Mr. Mansur Bhai, Sarpanch of Munnar Village.54 “I have been providing water to plot owners and also to workers’ basti everyday and earns thousands everyday. My relatives are also in one way or other way associated with ship recycling business. So it is not possible to oppose as our personal relation and business will be affected”, says Bhagvatsinh Haubha Gohil, Sarpanch of Sosiya Village.55

It is also alleged by the local trade union members that the local politicians are hand in glove with shipbreakers. Manipulation of rules and regulation and

52 Personal Interview with Mr. Ghanshyam Singh, Sarpanch of Alang Village in August 2013  
54 Personal Interview with Mr. Mansur Bhai, Sarpanch of Munnar Village in August 2013  
55 Personal Interview with Mr. Bhagvatsinh Haubha Gohil, Sarpanch of Sosiya Village in August 2013
corruption are rampant, and a handful of shipbreakers have things comfortably in control. If you take any action against them, they will reach the politicians and put pressure on government departments easily," says Ram Patel, Vice-President, Alang-Sosiya Ship Recycling & General Workers' Association. The results of this nexus are disastrous. Ships that might be carrying toxic wastes, PCBs, solid wastes, oil and other hazardous materials are docked at Alang virtually unchecked.
Conclusion

This project report has sought to ask and answer some pertinent questions about the implementation challenges for the workers' rights at Alang-Sosiya Ship Breaking Yard, Bhavnagar, Gujarat. First, what has been the status of living and working conditions at the ship breaking yard? Second, why the implementing agencies failed to implement effectively labour laws applicable to the ship breaking industries? And finally, what factors determined the non-compliance of labour laws at Alang-Sosiya ship breaking yard. We have examined these questions by reviewing labour laws and various government department reports with reference to Alang-Sosiya ship breaking yard, followed by a detailed analysis of various facts and observations and discussion with workers and other stakeholders through intensive field work at Alang-Sosiya from April 2013-May 2014.

The main aim of this chapter is to revisit the challenges for the implementation of workers' rights at Alang-Sosiya ship breaking yard. Overall, the report finds that there is no dearth of labour laws to protect and improve the working conditions and ensure the welfare of workers at Alang-Sosiya ship breaking yard. However, the implementation of labour laws and various government appointed committee recommendations has not been effective and taken seriously by various state government departments in Gujarat. The Supreme Court has issued a number of orders to protect and improve working and living conditions of migrant workers and environmental conditions. No doubt, efforts towards the improvement of environment has been made through creation of environmental infrastructures like solid waste management plant and safe disposal of hazardous wastes but working and living conditions of workers are still pathetic and there is no sign of improvement, except a few symbolic interventions. Based on the analysis of
various reports and field observations and discussion with a number state agencies, we feel the following specific strategies and steps need to be initiated to improve and protect the working and living conditions of the workers:

1. First and foremost, the Government of Gujarat and the key implementing agencies need to ensure better living conditions for the migrant workers. In this connection, the proposed housing facilities need to be completed as soon as possible so that workers avail it.

2. Equally important is to provide water and sanitation facilities in the living areas. The existing water and sanitation service needs to be expanded and more effective and regular. The labourers were living in inhuman conditions and were denied of basic facilities like drinking water, hygiene, and sanitation. It needs to be ensured that appropriate measures are taken immediately by the employers along with the State Government in this regard.

3. Database on migrant workers need to be created and updated regularly so that the migrant workers can avail facilities available under the Inter-State Migrant Workers Act. These migrant workers also need to be educated about their rights under different labour laws.

4. The labourers in the ship breaking yard worked for 10-12 hours and continuously worked for more than 240 days in a year but did not get minimum wages on time. They were also not given leave of any kind nor were wages paid to them during the leave period. In case of accidents, wages of labourers were deducted by the employer’s for treatment given to them. Further, they were deprived of wages, gratuity, provident fund, paid weekly day of rest and other benefits and social measures due to them. All this needs to be ensured for them as per the Workmen’s Compensation Act, 1923, Factories Act, 1948, Payment of
5. Almost all the labourers worked overtime but requisite wages were not paid to them for overtime work. Labourers who worked overtime need to be compensated adequately and sufficient time should be given to them for tea and lunch. There is also a need to construct rest rooms for recreation of labourers by the employers in the plots allotted to them for ship-breaking activities.

6. All the labourers in the ship breaking yard need to be issued an identity card. This would facilitate in knowing the whereabouts of a labourer's family in case of sudden death due to an accident.

7. Arrangements should be made by the employers in the ship breaking yard of Alang-Sosiya for giving supplementary nutrition to labourers. Similarly, there is need to construct a school for children of labourers. The medium of instruction in the school should be Hindi.

8. The implementing agencies also need to find out strategies to provide other state government schemes and services which are available to local village people in and around the ship breaking industries. One such initiative in this regard could be extending the public distribution schemes to migrant workers. Labourers in the ship breaking yard need to get subsidised rations under the public distribution system. At present, the labourers have no ration cards due to which they could not buy subsidised rations from the local ration shops. There is need to develop a system whereby all the labourers in the ship breaking yard could procure rations in subsidised rates.

9. Adequate health facilities at the ship breaking yard site with modern infrastructure and resources are required to treat workers getting injured
during ship breaking activities. In the absence of health facility, there is a need to set up an ESIC hospital immediately in Alang-Sosiya ship-breaking yard. In the current arrangement of giving treatment to injured labourers, the ESIC hospital in Bhavnagar, i.e., 55 kilometers away from Alang-Sosiya, was ineffective. Moreover, many labourers are denied treatment due to non-settlement of bills of labourers treated there earlier. An insurance coverage in the form of smart cards needs to be developed for all labourers to tackle the prevailing situation besides strengthening of the health and ambulance services.

10. Regular health camp and study by the health department of Gujarat needs to be done to understand the long-term impact of ship breaking activities and accordingly, preventive measures can be taken to protect workers from hazardous activities. For example, studies like the health risks of the ship breaking activities on workers as carried out in 2006-07 by the National Institute of Occupation Health, Ahmedabad, needs to be done regularly so that appropriate measures can be taken to reduce the health impact of ship breaking activities.

11. All the labourers in the ship breaking yard should be provided with standard personal protective equipments and safety kits as recommended by DGEASU to avoid health risks during working hours.

12. It was reported that since 2009 onwards a total of 77 deaths had taken place on account of accidents. A system needs to be developed for recording of each accident and death taking place in the ship breaking yard.

13. The industrial safety and health department of Gujarat, the IMC, the GMB, the SPAI, ESIC and other concerned authorities need to coordinate and ensure adequate health facilities for the workers. The current tussle
between ship recycling association of India and the ESIC needs to be resolved through dialogue and coordination of appropriate authorities and also immediate efforts should be made to start the trust hospital.

14. The ship breaking unit owners have to ensure that every worker working in their yard has health insurance policy and pelcham card so that there won't be delay in availing facilities under ESIC schemes.

15. Regular inspection by the factory inspector needs to be carried out to ensure better working conditions during the ship breaking activities.

16. Inspection reports need to be uploaded in the website of the labour and employment department of Gujarat.

17. The staff members in-charge of regular inspection for the implementation of labour laws need to be empowered both administratively and financially. Similarly, regular inspection by the Gujarat State Pollution Control Board needs to be carried out at the Ship Breaking Yard. For this purpose, the number of staffs has to be increased from its current strength.

18. The current training program for the workers need to be expanded to train workers how to handle disasters and take safety measures at the work place. Workers also need to be orientated about their rights under different labour laws in India.

19. Any future formulation and implementation of rules and regulation needs to be transparent, participatory and democratic in nature. Agencies required to implement various labour laws need to be accountable.

20. There cannot be delay any more in ensuring basic working and living conditions for the workers and the responsibility of each implementing agency needs to be fixed.
21. At the national level, efforts need to be made to bring diverse groups across South Asian Countries, especially in India, Pakistan and Bangladesh working in the field of toxic and hazardous wastes so that pressure can be made for an integrated approach in these countries to address workers' right and environmental issues due to Ship Breaking.

22. Attempts also need to be made for an international legislation on ship breaking. It has been demanded time and again by various environmental groups that the countries which send their ships for scrapping to India, Pakistan and Bangladesh must ensure that their ships are de-toxified in the territorial waters of the country to which the ship belongs.


24. There is no comprehensive occupational health and safety law in the country. As mentioned above that though there is provision to ensure better working conditions in the Factories Act and Mines Act, efforts made by the hazardous industries towards this provision are inadequate and in ship breaking industries, there are no efforts as far as workers' health and safety issues are concerned. It is also important to have a unified authority concerning hazardous related to work and more importantly, workers' right
to know about the hazardous activities of the industries should be made mandatory.

25. The functioning of Gujrat Maritime Board has to be transparent and effective. The GMB needs to outline its year-wise plan for infrastructure development at the ship breaking yard. It needs to go beyond its current frame of functioning to generate only revenue and act as an important institution in facilitating and promoting interests of both workers and ship breaking industrial units.

26. Strict action should be taken against ship breaking industrial units for not implementing and following labour and environmental laws. The implementation of laws effectively will only act as a deterrent mechanism to reduce the number of deaths and accidents at the ship breaking yard. The current measures against industrial units for not following rules and regulations have not been effective and have rather allowed the industrial units to get away with minimum penalty or fines.
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