

Hyperbolic Discounting in Occupational Safety and Health in South Asia

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Introduction

Occupational Safety and Health (OSH) is an urgent labour issue in South Asia. The extent of the problem was brought dramatically to world media attention in April 2013 by the Rana Plaza collapse in Dhaka, a single incident that killed over 1,100 workers. While efforts have been made to remedy factory safety in Bangladesh it is a drop in the ocean with estimates of preventable workplace deaths in the region in the tens of thousands and an even higher number of preventable deaths through occupational disease. It seems incredible that governments do not treat the issue more seriously. Regulation is ineffective and enforcement almost non-existent. Hyperbolic discounting, the irrational tendency to prefer smaller immediate rewards above greater but more distant ones, goes some way to explaining why and may point a way towards possible strategies for improvement.

Background

Scale of the OSH Challenge

The ILO estimates 321,000 deaths annually from work-related accidents and 2.02 million from work-related diseases. That equates to at least 6,300 work-related deaths every day (Takala, 2005). As this report noted, the accidental death figure alone is higher than the number of lives lost through warfare globally. Even these figures are underestimated as they rely on national reporting and India, for example, reported a figure in the low hundreds. This under-reporting is itself a symptom of the lack of resources allocated to OSH. One estimate puts the correct figure for India at 47,000 work-related deaths by injury and 350,000 by occupational disease annually (Ramachandran, 2014). This equates to an incidence rate for India twice as high as the USA. The estimated incidence for Pakistan is four times as high as the USA (Hassan, 2012). Thousands of lives could be saved if this was treated as the urgent crisis that it is. Further, there is also an economic argument for action: adding together both direct and indirect costs, the burden of occupational disease in India could be as high as 10-20% of GDP (Zodpey et al., 2009).

The following is an illustration of what these numbers mean in the real world: In May 2009 an explosion and fire occurred in the Lakhani shoe factory in Faridabad, about 35km south-east of New Delhi. The fire was caused by electrostatically charged particles, suspended in the air as a result of the buffing process, igniting the fumes of an open drum of glue. It was completely, even easily, preventable. The fire took ten fire brigades two days to bring under control. There were no fire control measures available in the factory; no fire hydrants and no water tank. The official report submitted after the incident to the labour department listed 15 deaths and 24 burn injuries. Local labour blog Gurgaon Workers News reported however, on the basis of the number of people known to be in the building at the time, that the true number of fatalities was likely to have been 50 to 100 (2009); it was impossible to prove because their names were not on the Lakhani pay-roll and the State does not employ forensic investigators. Who is to blame? The factory was being operated in violation of the national Factories Act but also made other safety failings that were not illegal per se. The State, for its part, never inspected the site and had no industrial fire safety policy. After the incident local trade unions formed a Joint Trade Union forum and demanded justice for workers and punishment for management, but they had not been active in lobbying for improvements to the laws and were not proactively demanding new rules that would make such incidents less likely in the future. All three parties, the employer, the State and trade unions were thus demonstrating hyperbolic discounting: the tendency to prefer a short-term benefit even when it compromises a long-term gain.

Hyperbolic Discounting

Discounting is a concept used in economics. The significance of ‘intertemporal’ choice was noted very early by Adam Smith and in 1834 by John Rae (Frederick et al., 2002, 2). The model antecedent to hyperbolic discounting was discounted-utility, proposed by Samuelson in 1937 (ibid.), which went so far as to put a numeric value on the point at which people will prefer an immediate over a later reward. This was shown over time to be empirically invalid and the hyperbolic discounting model proposed by Laibson (1997) is more accepted. This model assumes that the preference for later rewards decays at a hyperbolic rather than an arithmetical rate. For example, people will express a negligible preference for \$1000 in 30 years’ time over \$1000 in 31 years’ time; however they will

express a strong preference for \$1000 in 3 years' time over \$1000 in 4 years' time. The intensity of the preference for immediate reward decreases if both options are relatively distant.

The first person to question the discounted-utility model or variants of it was R.H. Strotz who in 1956 proposed two strategies a person can adopt to negate this tendency:

1. Pre-commitment, and
2. Consistent planning (that is, choosing not to make plans that one knows one's future self will not carry out) (Frederick et al., 2002, 22)

At the level of personal finance we can see plenty of examples where opportunities for pre-commitment are offered to the benefit of public policy, such as salary sacrifice and automatic savings plans, and conversely where this phenomenon is exploited, such as credit card interest-free periods and life insurance policies.

In this paper we propose that this phenomenon is a reason for inaction on safety and health by employers, governments and even worker organisations. Acting to prevent occupational accidents involves expenditure of money now to avoid spending money on healthcare and compensation in the future. Yet we see Governments fail to mandate action even when the immediate cost of prevention is significantly lower than the delayed cost of remediation. For the State it is even lower still because they would only be outlaying the cost of monitoring compliance, not the direct cost of implementing it. The question is: how might anti-discounting strategies be entrenched at the regulatory level?

Existing OSH law and regulation in South Asia

We define South Asia as the Nations of India, Pakistan, Bangladesh and Sri Lanka. These four countries have a population of just over 1.5 billion and a labour force of 640 million which is about 19% of the world total labour force.

South Asian economies and their industrial relations system both have the birth marks of 200 years of colonisation. These economies still remain trapped in a vicious cycle of underdevelopment reflected

in a very weak industrial base and huge surplus labour overcrowding in agriculture and various kinds of other rural and urban informal sectors. The industrial relations regime was shaped in such a way that better labour standards were applicable to only medium and large sized industrial enterprises and rest of the other workers who formed the huge majority of the nation's workforce were largely unprotected. This was presumed that gradually the economies will be transformed on the lines of developed capitalist countries and the whole or the majority of workforce may be shifted to industries and thereby they may also enjoy the better labour standards. However, due to various factors including the stagnation in industrial growth since the 1970s, the above dynamics did not appear and in the more recent phase of development under corporate-led globalisation these distortions were intensified. With institutionalisation of the new international division of labour the duality of economy and labour (formal and informal sectors) were also institutionalized. Therefore, the new international division of labour not only led to drastic increase in occupational safety and health problems but also created a hidden epidemic in terms of an alarming rise in OSH problems in informal sectors that was somewhat invisible, because regulations on OSH generally did not cover these sectors. Moreover, the export oriented development based of foreign direct investment created a dynamic wherein almost all the developing countries were compelled to compete with each other to reduce the labour costs by making labour more flexible and exempting various industries from applicability of labour laws. This dynamics actually reversed the pre-globalisation trends and drastically increased the size of unprotected labour, and worsened the occupational safety and health problems.

All four South Asian countries inherited similar colonial labour legislative frameworks. After independence a lot of new labour laws were enacted to extend the coverage of labour regulations, but the basic nature of labour laws did not change much. There are plethora of inconsistent labour laws that make the industrial relations very complicated. There were some attempts in some South Asian countries towards integration in labour laws to make them more consistent with each other. Bangladesh Labour Act 2006 and Industrial Relations Act 2008 were attempts in this direction, however, a number of categories of workers still remain excluded from the scope of these labour laws.

In Sri Lanka, comparatively more uniformity and consistency is achieved in labour laws than other South Asian countries. At present, there is no comprehensive labour legislation on occupational safety and health in any of these countries.

Pakistan

In Pakistan major laws touching on health and safety include:

- Factories Act 1934
- Hazardous Occupation Rules 1963
- Punjab Factories Rules 1978
- Sindh Factories Rules 1975
- North-West Frontier Province Factories Rules 1975
- West Pakistan Hazardous Occupations Rules 1963
- Mines Act 1923
- Provincial Employees Social Security (Occupational Diseases) Regulation 1967
- Workmen Compensation Act 1923 and Rules 1961
- Dock Labourers Act 1934
- West Pakistan Shops and Establishments Ordinance 1969

The Factories Act 1934, chapter 3, is the only law that addresses OSH issues in Pakistan. This law applies to facilities where ten or more workers work and any manufacturing procedures are conceded. Hiring a social official is required only in the case of 500 or more workers, instituting a refectory in an establishment is required only in case of 250 or more workers and rest-shelters are required only in case of 150 or more workers. Many sectors with enormous hazards and of great quantum are not covered under the Factories Act, such as agriculture, construction and informal/self-employment. Moreover, there are no outlines for minimum qualifications of health and safety professionals. Labour policy of 2001 and 2010 had assured occupational safety and health legislation, OSH ombudsman and tripartite monitoring councils but it was never legislated. Labour policy of 2010 attempted to bring some consistency and coherence in labour laws but by and large, it remained dysfunctional and

detached from labour regulations. Moreover, many issues remained unaddressed, e.g., agricultural and construction workers' right of organizing and collective bargaining was not covered in the labour policy of 2010 (Hassan, 2012).

The Factories Act 1934 gives monitoring power to the district magistrate of each district but in actual fact there is no trained staff to carry on such monitoring; for example, Punjab, which is the largest province of Pakistan only, has only 2 technical inspectors of factories and only one industrial hygienist for the monitoring of 36 districts of Punjab (AMRC, 2013). There are only 160 labour safety inspectors in Pakistan, which means 0.008 safety inspectors per 1000 workers employed (Pasha and Liesivuori, 2003).

Bangladesh

In Bangladesh, the laws relating to occupational safety and health include:

- Factories Act 1965 and Factories Rules 1979¹
- The Shops and Establishments Rules 1965²
- The Maternity Benefit Act 1939 (Modified by Act LIII of 1974: any woman worker /employee employed for a period not less than 9 months immediately preceding the day of the delivery)
- The Dock Labourers Act 1934 and the Dock Labourers Regulations 1948
- Workmen's Compensation Act, 1923 (amended in 1987 and applies to factories, docks, construction work, railways, transport workers, excavation, gas and electricity workers, etc.)
- Tea Plantation Labourers Ordinance 1962
- Employment of Children Act 1938 and enabling Rules.

The problem in most of these laws is that they do not specify the standards for various aspects of occupational safety and health and they are only general in nature. As such the prevalent rules and

¹ 'Factory' means any premises engaged in manufacturing and employ 10 or more workers

² Establishments employing five or more workers

regulations are insufficient or inadequate in terms of standards and permissible limits. No organisations or agencies have been developed which could be a referral centre for different standard or occupational permissible limits. On the other hand, the enforcement department, the department of inspection is not equipped to enforce the occupational safety and health standards. Moreover, a huge section of workforce is left outside the coverage of these laws. In November 2000, ILO and ADB signed a Regional Technical Assistance Agreement (RETA) and one of its aspects is focused on reducing occupational safety and health hazards. Bangladesh is one of the countries in Asia Pacific region (along with Philippines, Thailand, Nepal) included in this program however there is no visible impact of this program (ILO, 2002) (ILO, 2013).

Bangladesh labour policy 2006 was an attempt to bring coherence and consistency in labour laws. Most of the provisions of this law cover all enterprises engaging one or more workers. This policy was amended in 2013 and several provisions to improve workplace safety were included in the law, such as creation of safety committees in factories with 50 or more workers, provisions of personal safety equipment, provision for workplace Health Centres in workplaces with over 5000 employees, provision for safety welfare officers in workplaces with more than 500 workers, and to conduct on-the-spot inspections of OSH conditions. 2013 amendments provided for compensation for work-related deaths after two years in employment, compared to the earlier provision requiring three years of employment. Moreover, amendments also introduced a provision for workplaces of over 500 workers that employers will be required to arrange for and cover the cost of treatment of occupational diseases (ILO, 2013).

In the wake of an alarming rise in disastrous fire accidents in garment industries and particularly after the Rana Plaza incident which took the life of 1,100 workers and seriously injured more than 2,000 workers, a corporate social responsibility (CSR) kind of initiative was taken in the form of the Accord on Fire and Building Safety in Bangladesh. The agreement doesn't create any additional legal liability, and the companies only have to meet the terms of the agreement. It is interesting to note that even then, after hectic efforts of more than one year only 166 apparel brands and retailers have

signed this Accord. The relevance of the Accord is highly propagated and claimed that it is legally binding in nature and with independent inspection programs and transparency to the public and to workers but, firstly, it is not mandatory for all the brands and retailers to be a signatory to the Accord and, secondly, trade unions are not part of enforcement machinery of the Accord. Two global union federations, eight Bangladeshi garment workers' unions and union bodies, and four international labour rights organizations which are part of the Accord are only witness signatories and have no enforcing authority. Rather than a progressive development, the Accord appears more as a regressive development in that rather than upgrading the law of the land and strengthening its enforcement machinery to bring the brands and retailers in the fold of law to compel them to comply with OSH standards and share its costs, the Accord actually attempts to replace or at least weaken the state in this regards. The workers can affect the state and their elected governments to enact better laws and for a better enforcement machinery but they do not have any space to affect such CSR kind of accords. Therefore, the dynamics of the Accord actually reduces the power of workers to agitate to improve their conditions of work. The failure of the Accord is visible in the fact that the victims of fire accidents are still suffering from the consequences of the terrible tragedy and a majority of them have still not received compensation. There is also no change in the conditions at the ground. The firms are still using child labour, beating staff, ignoring fire safety rules and threatening trade union members with murder etc. (Oldenziel, 2014) (Neville, 2013) (Baker, 2013) (Nelson, 2014)

India

In India, There is no comprehensive legislation on occupational health and safety. The laws related to occupational health and safety include:

- Factories Act 1948
- Workmen's Compensation Act 1923
- Employees State Insurance Act 1948
- Mines Act 1952
- Dock Workers (Safety, Health and Welfare) Act 1986

- Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996
- The Plantation Labour Act 1951
- Shops and Establishments Act
- Beedi and Cigar Workers (Conditions of Employment) Act 1966

There are also various subordinate legislations on OSH under the Factories Act and the Mines Act including:

- Environment (Protection) Act 1986
- Water (Protection and Control Pollution) Act 1974
- Water (Prevention and Control of Pollution) Rules 1995
- Air (Prevention and Control of Pollution) Act 1981
- Air (Prevention and Control of Pollution) Rules 1995
- Hazardous Wastes (Management and Handling) Rules 1989
- Manufacture, Storage and Import of Hazardous Chemicals Rules 1989
- Explosives Act, 1884
- Gas Cylinders Rules 1981
- Explosives Rules 1983
- Static and Mobile Pressure Vessels (Unfired) 1981
- Insecticides Act 1968
- Indian Boilers Act 1923
- Coal Mines Regulations 1957
- Metalliferous Mines Regulations 1961
- Oil Mines Regulations 1984

The above picture itself reflects the complexity and multiplicity in labour legislation. Major labour laws on OSH are applicable only in larger enterprises. For example, the Factories Act is applicable in manufacturing enterprises with 10 or more workers (with power) and 20 or more workers (without

power). Moreover, all provisions of Factories Act are not applicable to all factories. Provision for crèche is applicable only if 30 or more women are employed, provisions of a rest room is applicable only if there are 150 or more workers, provisions of canteen is applicable only if there are 250 or more workers, provisions for ambulance, dispensary, and medical and para-medical staff is applicable only if there are 500 or more workers. Similarly, Employees Provident Fund and Miscellaneous provisions Act, Maternity Benefit Act and Payment of Gratuity Act apply to establishments with 10 or more workers. On the other hand, Employees State Insurance Act applies to only those establishments (not seasonal) with 20 or more workers. There is also a maximum salary cap on applicability of Employees Provident Fund Act and Employees State Insurance Act. It is to be noted here that as high as 97 percent of the enterprises employing 66 percent of workforce of all enterprises employ less than ten workers and are out of the coverage of most of the above legislations. Few laws that cover informal sectors generally lack any significant provisions for regulating OSH, and even if in some cases some OSH provisions exist, there is almost absence of any enforcement machinery. The laws applicable in formal sectors that contain OSH related provisions include

- Shops and Establishments Act
- Workmen's Compensation Act
- Insecticides Act 1968
- Dangerous Machines (Regulation) Act 1983

There are also some OSH related provisions in Krishi Shramik Samajik Suraksha Yojana (Agriculture Workers Social Security Scheme) 2001 and in Unorganised Workers Social Security Act 2008 (Pratap, 2011) (Pratap, 2012).

It is worth mentioning that, with the advent of globalisation and liberalisation, the situation has further worsened. On the one hand, informalisation (by way of shifting jobs from the formal to informal sectors and by informalisation of workforce in formal sectors) has drastically reduced the proportion of workers covered under the protective labour laws; and on the other hand, liberalisation of the industrial relations regime in terms of allowing self-certification under various labour laws, exemptions to various industries from applicability of various labour laws and discouraging the

inspections for ensuring compliance of laws have to a great extent made the labour laws meaningless. The labour department meanwhile is completely paralysed due to cuts shrinking the size of the staff. There are only 2,642 Safety Officers, 604 Inspectors (against a sanctioned strength of 938) and 35 certifying surgeons (against a sanctioned strength of 94) in the country. Over and above all this, the current initiative of the governments for amending labour laws is decisively moving to institutionalise an even more pro-capital labour relations regime. The process has been initiated to amend Factories Act 1948, Industrial Disputes Act, Minimum Wages Act, Labour Laws (Exemption from Furnishing Returns and Maintaining Registers by Certain Establishments) Act, Contract Labour (Regulation and Abolition) Act, and Apprentice act. If the governments are able to do these amendments in labour laws then almost whole Indian workforce may be practically informalised by:

- a) effectively shifting the enterprises with less than 50 workers to the informal sector, as the contract labour abolition and regulation act and section 25FFA of Industrial Disputes (ID) Act (requirement of permission for closure) will not apply to them (moreover, enterprises up to 40 workers would not bother about labour laws as they will be exempted from furnishing returns under labour laws, and the factories act will not be applicable to establishments up to 20 workers with power and 40 workers without power); and
- b) informalisation of workforce in enterprises with less than 300 workers, as the protective provisions of ID Act (related to retrenchment, layoff and closure) will not apply to them, and they will be permitted to engage huge proportion of workers as apprentices. This system will offer super profits to the employers by providing a huge space to engage vulnerable and cheap labour in the form of contract workers and apprentices, and over and above all this, they may also be able to save almost half of the wage bill by virtue of a provision for government bearing half of the cost of stipend to apprentices in enterprises with a turnover of less than INR 1000 million (in Indian context the enterprise with up to 300 workers). All of this has the potential to drastically increase the problems of OSH, because after these amendments the labour laws will lose even more relevance for most enterprises (Pratap, 2014).

It is also interesting to note that years back a National policy on safety, health and environment at the workplace was framed which promised for a comprehensive legislation on Occupational Safety and Health in respect of all sectors of industrial activities, designing suitable control systems of compliance, enforcement and incentives for better compliance, and an apex body on Occupational Safety & Health under Ministry of Labour (Chandramouli, 2001). However, rather than moving forward in that direction, the Government seems to be moving backwards.

Sri Lanka

In Sri Lanka for the most part labour laws are applicable only in the private sector, and the public sector is governed by the Establishments Code. The laws related to occupational health and safety include:

- Factory Ordinance 1942 plus amendments
- Shop and Office Employees Act 1954
- Workmen's Compensation Ordinance 1934 plus amendments
- Maternity Benefits Ordinance 1939 plus amendments
- Wages Board Ordinance
- Employment of Females in Mines Ordinance
- Employment of Women, Young Persons and Children's Act 1956

Municipal Councils by-laws and regulations also cover OSH-related matters. Separate legislation titled Occupational Safety, Health and Welfare Act is already being drafted and, if it is enacted and implemented, it will be applicable to all places of work, including the public sector. A separate unit of the Health Ministry, Environment and Occupational Health Unit, has also been established and it is directed to establish occupational health units in all districts (Mudurawala, 2013) (Frost et al., 2003) (Amerasinghe, 2009).

It is worth mentioning that the labour laws in Sri Lanka have more uniformity and consistency than that in India, Bangladesh and Pakistan. Only self-employed workers, micro enterprises with less than two workers, domestic workers, health aides, nannies, and other forms of 'home help' are not covered by the laws. The factories ordinance of Sri Lanka not only included manufacturing but also construction, dock and yards etc. Moreover, all enterprises (in sectors covered under the Factories Act) engaging one or more workers are covered under the Factories Ordinance as against other South Asian countries where only manufacturing enterprises with 10 or more workers are covered. Exemptions from the Provident Fund Act is granted to Social Service Institutions which provide training for youthful offenders, the destitute, the visually and aurally handicapped, Charitable Organizations employing less than 10 employees, establishments where only members of a family work (if even one employee is employed from outside the family the institution is bound to pay contributions). The gratuity provisions do not apply to companies that have fewer than 15 employees. There is no pension scheme for private sector employees (World_Bank, 2014).

It is interesting to note that under the pressure of IMF the government has already started a package of labour reforms, which includes changes to overtime legislation, 14 days' notice of strike (currently no notice is required), changes to the Termination of Employment Act making it easier for workers to be dismissed, and replacement of tripartite wages boards with productivity councils. The Government has already amended the overtime legislation for women increasing the maximum limit of overtime hours from 100 hours per year, to 60 hours per month, or 720 hours per year. The original proposal was to increase it at 100 hours per month but due to opposition from trade unions it was limited at 60 hours per month. Under the current Termination of Employment of Workmen Act for terminating a worker on non-disciplinary grounds, the employer must get permission from the Commissioner of Labour and an internal inquiry must be held. If the Commissioner gives permission, some compensation will be granted to the worker. The proposed amendment intends to grant freedom to employers for firing a worker as and when required by giving some compensation. Under the current Termination of Employment of Workmen Act for terminating a worker on non-disciplinary grounds, the employer must get permission from the Commissioner of Labour and an internal inquiry must be

held. If the Commissioner gives permission, some compensation will be granted to the worker. The proposed amendment intends to grant freedom to employers for firing a worker as and when required by giving some compensation. The situation has already worsened with employers refusing to recognise the trade unions, and legal strikes are almost impossible because workers' councils need to give 14 days prior notice before strike (Frost et al., 2003).

Informal employment and regulation

As set out above, the very high prevalence of informal work, outside the mechanisms of labour legislation, further complicates efforts to improve OSH in the region. Regulations are almost always directed at the employee-employer relationship, enforced by a state, which not only excludes informal workers from their coverage but has created an incentive to do so. People pushing for regulation make their own work harder if they treat the so-called standard employment relationship (SER) and national citizenship as normative (Vosko, 2011). Moreover, the notion of the SER is to some extent an outcome of the historical growth of the labour movement in Global North countries. In South Asia, the labour movement is tiny. Without active worker organisations, people will remain employed informally as it is more in the interests of capital for them to do so. One means of escaping this trap identified by Vosko is a cross-border partnership to connect one party to the true power holder even where that is not the employer. In the situation of OSH that would mean, for example, pressuring the power holder to provide safety equipment and training to its contractor/suppliers. At present the normative power of the employment relationship is such that they can easily disavow such obligations. This dovetails with the argument of Merk (2014) that, in the context of garment manufacturing, overseas pressure groups overestimate their ability to bring about change at the end of their supply chain because they do not account for the power of the unseen primary sourcing companies, the likes of South Korea's Youngone Holdings or Hong Kong's Li & Fung.

Many anti-sweatshop campaigns and union strategies have been based on the assumption that brands and retailers have the necessary leverage to impose changes upon their suppliers with regard to labour standards. Hence, for labour rights advocates, the increasing power of [Tier 1

sourcing] manufacturers calls into question some of the presumed power dynamics within the global production of garments (Merk, 2014, 278-79)

The majority of the world's garment workers are still employed by small, locally owned (tier 2 and tier 3) enterprises and enjoy very little or often no legal protection at all (ibid, 281)

Merk is pessimistic that Western brands can force compliance all the way up their supply chains or, for that matter, that Western interests will sustain the necessary pressure for long enough to find out.

Another model is the ILO's Better Work programme that has grown from the original Better Factories Cambodia (BFC) programme. Under this system the ability to affect change is intended to be shared between ILO inspectors and workers, whose capacity to demand improvements is gradually enhanced under the program. BFC offers worker training that helps improve quality and productivity, as well as negotiation and supervisory skills. Other elements are the presence of an independent Arbitration Council and union training (Oka, 2014, 261-262). Such private, non-state regulation is still disempowering to Cambodians who do not have a say over the 'rules of the game' nor a mechanism for voice with the ILO inspectorate. The same is true of the Bangladesh Accord that establishes worker voice at factory level while the workings of the Accord itself, including the critical decision not to push for free trade unions, is not something over which the affected Bangladeshis have any say. If such initiatives were a *supplement* to legal control that would be more reassuring but they are both fairly clearly intended to remedy state inaction. The ILO's intention is that it would eventually withdraw from BFC and hand it to a local independent entity however there is no sign that this will take place soon or, indeed, ever (ibid, 272). Similarly there is no road map for union involvement in the Bangladesh Accord to be localised. This focus on factories in the exporting sector is another manifestation of 'SER-centrism' (Vosko, 2011). There are unions organising informal workers, particularly over the issue of wages, even in the absence of an employment relationship but they do not seem to be making a lot of headway in tapping this vast pool of potential members (Sarkar et al., 2012, 13).

The outlook is not completely bleak. Local advocacy can achieve real OSH improvements affecting even informal workers and we now turn to some examples.

Case studies

1. Central Government requests State Government to investigate violations

In 2013 the Indian Minister of State for Labour took the proactive step of requesting that the State Government of Odisha to submit a report on a fire and explosion at Bhushan Steel Limited's plant at Meramundali that was reported to have killed three people and injured 29. This is a good strategy on the part of the Minister; the Central Government has no reason to not see the investigation carried out since the State Government has to incur the financial and political cost of the investigation. On completion of this investigation, district officials found that the accident was preceded by over 96 known breaches of labour laws and, tired of having their warnings ignored, arrested the company CEO (Sheriff, 2014).

2. State Government measures incidence of cancer after occupational link established

In the Indian state of Punjab, a high incidence of cancer was noticed among the agricultural population and a study (Thakur et al., 2008) determined that the likely cause was pesticide spraying. The number of cases has grown so large that the State of Punjab has begun a survey to accurately measure its prevalence (Lakshmi, 2013). This is a long way short of a remedy but it is the necessary first step. This case is also a good example of how unfamiliar OSH activism looks in the context of informal employment. In this situation the workers were self-employed farmers and the object of liability is their supplier, not their employer. Nonetheless it is still a situation of occupational disease, demonstrably brought on in the course of employment.

3. High Court orders State Government to allocate resources

In 2006 activists in Gujarat filed an innovative suit demanding that the Ministries of Health and Labour & Employment assist the National Human Rights Commission (NHRC) on action relating to silicosis³. The NHRC had made investigations revealing that silicosis was very prevalent but was unable to state *how* prevalent because the Ministries were not assisting by providing reliable statistics (Boyko et al., 2013). By failing to measure the extent of the problem, they were able to carry on without allocating resources to addressing the problem. As a result of the suit and subsequent attention, the NHRC requested the State Governments to create policies encompassing prevention, treatment and rehabilitation. In August 2012 the Government of Gujarat announced that it would set up an insurance scheme to compensate next of kin of informal workers which represents an improvement although less than a complete attainment of the objectives set out by the NHRC.

There have been similar cases of such strategic litigation:

- An earlier petition, also filed in the Supreme Court of India, resulted in an order handed down in 2008 directing immediate action on OSH matters in all thermal power stations⁴ which included a comprehensive direction from the Court on steps to be taken and a time frame for parties to report back on progress made.
- Public interest lawyers in Pakistan filed a suit in the Supreme Court of that country in 2014 on behalf of self-employed stone-cutters suffering silicosis as a result of dust inhalation. The petition argues that their working conditions are a breach of their right under s. 4 of the Constitution of Pakistan that “no action detrimental to the life, liberty and body of any person shall be taken” and furthermore that the State labour department shares liability with the factory owners on account of

³ *People’s Right and Research Centre (PRASAR) & Others vs. Union of India & Others*, Supreme Court of India, Writ Petition (Civil) No. 110/2006.

⁴ *Occupational Health and Safety Association vs. Union of India & Others*, Supreme Court of India, Writ Petition (Civil) No. 79/2005.

its failure to enforce the law. At time of writing the case is at the hearing stage⁵ but is already notable due to the Court having summoned Government ministers to provide evidence in person.

Anti-discounting principles

Basic OSH safeguards as set out in ILO Convention 155 are preventative and call for the allocation of resources before or during operations. Going back to the strategies proposed by Strotz, namely pre-commitment and consistent planning, one major impediment is the temptation to, in the future, raid resources allocated to OSH for more politically expedient projects. This affects both employers and government although in the South Asian context the greater relevance is governments. One way to avoid this scenario is to have funds diverted into a safety fund before they ever reach the account books. Even that requires oversight though; Indian workers face a particular challenge outside the scope of this paper whereby the body set up for precisely this purpose, the Employees' State Insurance Corporation (ESIC), collects vast receipts but disburses them at a much slower rate. In 2012 it had assets equivalent to USD 1.8 billion yet revealed under the Right to Information Act that it had reports of only 1,576 cases of occupational disease for the entire country (Gupta and Patel, 2012).

Another indirect way in which the cost of preventative strategies can be dodged is by shifting the cost burden from one level of government to another, or from one organisational department to another. Something like this happened in Australia in 2012, except in a regressive fashion, when the Government of New South Wales changed workers' compensation legislation to reduce employer liabilities with no expectation that there would be an associated reduction in *injuries*, thus effectively transferring medical costs onto the Federal Government Medicare system (and thus, ultimately, on to households). An anti-discounting strategy is to preserve the OSH function to the greatest extent possible in a parliamentary democracy.

⁵ *Usama Khawar vs. Federation of Pakistan*, HRC No. 16143-P of 2014. There is also an associated Writ Petition in the State High Court: *Zain Sahid Ali etc vs. Government of the Punjab etc*, Lahore High Court, Case No. 13654-14

A further way to pre-commit is to appoint or employ an OSH champion who is independent of government or management and can continue to advocate for the issue into the future. The OSH Committee model used in Bangladesh is an example of this strategy. The first priority of this person ought to be reliable reporting followed by implementing preventive measures. Employers ought especially to be obliged to pre-commit as they can insure themselves against the costs of an industrial disaster, even further reducing their incentive to outlay costs on preventive action.

The same behavioural laws apply to worker organisations. In their case the challenge is to allocate sufficient resources to capacity building rather than constantly dealing only with emergent issues. The Rana Plaza collapse and Lakhani fire responses both illustrate this point; attention has gone towards retrospective compensation payments for victims' families rather than calling for a compensation system where this would happen automatically. The silicosis court actions are examples of effective anti-discounting as they seek permanent resource reallocation.

Conclusion

Informal employment is a major blind spot in South Asian labour law and proposals for re-regulation to promote OSH should not tackle the problem using an employee-employer paradigm. Supply chain advocacy or CSR is a solution that appears to be overrated and also has the potential to undermine the democratic process. Calls to improve regulation around OSH that can pass both these tests (that is, that aren't SER-centric and that do encourage greater citizen participation) will need to be strategic and where possible find means to sidestep the innate resistance to spending money up-front. One method that seems effective, as we have presented in this paper, is to entreat one arm of Government to force the hand of another, for example requesting that the judiciary compel the executive or that the national government compel a state government.

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