

The Nokia SEZ Story

Economy of Disappearances

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The closure of Nokia's mobile phone assembly plant in Sriperumbudur, near Chennai, just eight years after it commenced production, illustrates how corporations can quit operations at a point when it is no longer profitable for them to continue, while the impact of such closures on workers is profound. The special economic zones policy of the state actively promoted corporate-led industrialisation promising employment, and creating aspirations among young workers. There was no accountability or labour-centred exit policies factored into the state's industrial policies when state governments welcomed private investments. With the closure of Nokia, not only have promises been broken, but its workers and supply companies have lost their livelihoods and future possibilities of work.

In May 2014, around 4,800 workers of a mobile phone assembly factory outside Chennai, took voluntarily retirement from their jobs. Many were as young as 21 years. They were all workers of Nokia, a Finnish phone company that had once dominated the mobile phones business globally. In 2005, when the company decided to set up its largest phone assembling plant in India, promising to churn out 6.5 lakh phones a day, and bring in big investments along with supplier companies that would generate thousands of jobs, an excitement gripped the central and state governments. The entry of the phone company and its seven supplier companies was seen as the harbinger of electronics hardware manufacturing in Tamil Nadu and a positive outcome of the special economic zones (SEZ) policy and legislation.

However, eight years after creating a big buzz, everything fell silent. Gone were the jobs, the workers, and the promised investments; the Nokia mobile phone factory shut down, lock, stock and barrel. And 10 years down the line, even the SEZ policy hardly has many takers. In 2013, union minister of commerce and industry while responding to a starred question in Parliament acknowledged: "reduced interest in setting up SEZ units ... is visible in the increased requests for denotification of SEZs especially in the last two years" (GoI 2013). Between 2011 and 2013, 54 projects were de-notified by the Board of Approval for SEZ projects.

'A Conjuring Trick'

In 2000, anthropologist Anna Tsing (2000) wrote of a dramatic event that took place in Indonesia. A small Canadian mining company claimed that it had found gold in the forests of Kalimantan, Indonesian Borneo. The "find" grew big over a period of three years (during 1994–97) with investors from North America, pensioners, even towns in western Canada investing money into this small Canadian company. Then all of a sudden in 1997 it was announced that "Busang was barren"! It was a spectacular theatrical performance as Tsing (2000: 118) writes: "Bre-x was always a performance, a drama, a conjuring trick, an illusion, regardless of whether real gold or only dreams of gold ever existed at Busang." She calls it the "economy of appearances," "the self-conscious making of a spectacle [that] is a necessary aid to gathering investment funds" (Tsing 2000: 118).

The story of Indian SEZs is somewhat similar to what Tsing describes. It was a "spectacular performance" in the media by Indian politicians, bureaucrats, industry associations, all

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selling the “dream” of a secured “future,” and for the people it was, as Jamie Cross (2014:68) notes: “stable, secure, employment that lay at the heart of their hopes.” He called the zones “exemplary site[s] of anticipatory practice,” where an “unknowable future” is explored through “modes of planning, calculation ... mapping development visions” (Cross 2014: 9). Since 2000, SEZs were first introduced into Indian economic policy. Later in 2005, they were legislated into national law and incorporated into industrial policies of the individual states, the idea of zones “conjured” possibilities of an “economic prosperity” with increased industrial production, foreign investments, exports, employment generation, and the development of large-scale infrastructure projects. However, in 2014, the Comptroller and Auditor General of India (CAG) severely criticised SEZs for their failure to deliver on all counts. CAG’s 2014 report notes that 52% of land allotted to SEZs, some dating back to 2006, had remained “idle,” land acquired for “public purposes” (to set up SEZs) had been diverted for commercial purposes (up to 100% in some cases) after de-notification of several SEZ projects (CAG 2014: v). The report also showed, based on data from 117 SEZs that there was a “nearly 93%” shortfall between the actual employment generated through these projects and what was promised or projected during approval of the SEZs.

Further the CAG (2014: 20) report noted the selective location of the zones in already industrialised and “infrastructurally developed” states, exposing the fallacy of the claims that zones are “necessary” for overall regional development. Based on the data available on trade, investments, exports, employment and infrastructure, the CAG (2014: iv, 10) notes that SEZs do not show any “significant impact” on any of the factors that were the key objectives for setting them. Instead, the government highly subsidised private capital via tax exemptions of more than ₹83,104.76 crore in “anticipation” of the country’s economic growth. CAG’s audit of the Indian SEZs shows what Tsing (2000) had once called “a performance, a drama, a conjuring trick, an illusion,” a theatrical enactment that promised a great finale but when the show ended there was not much to write home about. Ironically, even after all the broken promises, the “SEZ dream” still continues to persist in the imagination of the state with the present government’s “Make in India” campaign, which is making plans to “revive” SEZs in anticipation of “boost[ing] domestic economy” (Seth 2015).

‘Economy of Anticipation’

In 2003, Tamil Nadu adopted SEZs as a key strategy to boost economic growth through private corporate-led investments. It was one of the first Indian states to formulate the SEZ policy in 2003, followed by a legislation entitled the Tamil Nadu SEZ Act 2005. In a short span, the state managed to attract applications from over 100 SEZ developers. In anticipation of investments, changes were made to the industrial policy, including creation of “land banks” to facilitate the setting up of SEZs (GoTN 2007). The state boasted of “good quality manpower at a comparatively low cost ... a rich labour pool comprising of well qualified, skilled,

disciplined, productivity-oriented and English-speaking workforce” (Thangamani 2012: 4).

In fact, the vision of industrialisation in the state through the establishment of zones is in line with Tamil Nadu’s already established image as an industrialised state. Stagnation of the agriculture sector, a high rate of landlessness (asset inequity), diversification of the rural economy and, importantly, the early sociopolitical shifts brought about by the anti-upper-caste Dravidian movement have significantly shaped the modernising ethos and industrialisation patterns in the state (Vijayabaskar 2010). The aspiration for social and political change has built up over many decades in Tamil Nadu. Industrialisation promised to change the lives of a large number of people, especially the young, through employment and the consumptive economies they may generate. As Cross (2014: 68) argues, projects such as SEZs “invoke local registers of aspiration and tap into vernacular dreams for social and material transformation that are assembled from globally circulating media forms and out of social histories.”

An important factor that built consent for establishing the zones in the state as Vijayabaskar (2014: 305) notes is: “lower-caste mobilisations against the traditional, caste-based division of labour [which] have contributed to a general desire to exploit opportunities for social, economic, and spatial mobility—which in practice means moving away from a reliance on agricultural employment as the primary source of livelihood”. This perhaps may have had a role to play in the nature of contestations around SEZs in the state which were “less systematic resistances” (Vijayabaskar 2014: 304) as compared to the other states of India that saw large-scale protests by landowners, farm workers, political parties, labour organisations and civil society organisations over the acquisition of land for establishing the zones. Vijayabaskar (2014: 305) noted two key factors that contributed to the “lack of concerted resistance” in the state—“the state’s evolving political economy; and the strategies deployed to curb resistances.” He argues that a combination of formal legislation along with “informal, micro-level processes, such as the use of legal resources, intermediaries, coercion, negotiation and contestation” (Vijayabaskar 2014: 305) created conditions for the establishment of SEZs in the state. It is therefore against this backdrop of the “aspirations” of the state and people that I now turn to discuss the entry of Nokia Telecom SEZ in Tamil Nadu and the “economy of anticipation” (Cross 2014) that accompanied this.

India’s Shenzhen

In 2005, when the Finnish multinational Nokia Corporation, with the world’s largest share in the mobile phone market at that time (Whitney 2014), decided to set up its largest mobile phone assembling plant in India, there was an “intense struggle” amongst the various Indian states to attract the company to their respective territories (Haryana, Maharashtra, Andhra Pradesh, Uttarakhand, Karnataka and Tamil Nadu) (Oskarsson 2005: 25; Das 2014). Corbridge and Harriss (2000) noted that the competition between states to attract investments had increased the speed of liberalisation in parts of India “more

than is often recognised.” A scrutiny of the memorandum of understanding (MoU) signed between the Tamil Nadu state government and Nokia India Private Limited (NIPL) (a 100% subsidiary of Nokia Corporation, Finland) on 6 April 2005 (TN Industries Department 2005) revealed the “support” offered by the state government, in addition to the already “liberal” fiscal incentives given in the SEZ Act that included land at a concessional rate and reimbursement of value added tax on phones sold in the country. It cost Tamil Nadu government ₹645.4 crore to “attract” Nokia’s investment into the state (Dutta 2009: 25). The Government of Tamil Nadu allocated NIPL 210 acres of land adjoining the national highway (NH-45) to develop a “product specific SEZ (Nokia Telcom SEZ) and to bring a cluster of its vendors/manufacturers of electronic components” (GoTN 2005).

Much before the Finnish corporation Nokia set up its mobile assembly factory in the outskirts of Chennai, the state had already started acquiring farming land as part of its industrialisation plans through the establishment of industrial estates and industrial areas from the 1960s onwards. However, it was only after the enactment of a special land law (the Tamil Nadu Land Acquisition for Industrial Purposes Act 1989) did the state start creating “land banks” for industrial and infrastructure projects. For instance, the land that was leased to Nokia Telecom SEZ for 99 years was acquired in the mid-1990s from local farmers.¹ In 2005, when Nokia set up its largest mobile phone assembly plant inside the zone, the area already had a well-developed network of national and state highways, an international airport at a distance of 25 km and a major seaport within 40 km and connected to the metro cities of Chennai and Bengaluru. The Indian press called Sriperumbudur “India’s Shenzhen” (*Times of India* 2009) and the World Bank (2009: 13) wrote in its *World Development Report 2009*: “In 1990 Sriperumbudur was known mostly as the place where Prime Minister Rajiv Gandhi was assassinated. In 2006 his widow, Sonia Gandhi, watched as Nokia’s telephone plant churned out its 20-millionth handset.”

Nokia set up its largest mobile handset manufacturing (assembling) plant in the world, with a capacity of 6,50,000 handsets a day in the Sriperumbudur plant in 2005 and started production in January 2006.² Within five years, the factory had produced 500 million mobile phones. The target was clearly the Indian market. Fifty percent of the phones produced in the factory were sold in India and the rest were exported to the Middle East, Africa and other Asian countries, as well as to Australia and New Zealand (Nokia 2007). Nokia brought along its suppliers: Salcomp, Perlos, Aspocomp (all Finnish companies), Laird and Jabil (both United States companies), Foxconn and Wintek (both Taiwanese companies), and Flextronics (a Singaporean company) to the zone (Table 1). These companies supplied semi-assembled component parts to Nokia’s assembling plant and also accessories such as chargers, batteries, etc. In the Nokia MoU, a clause extended similar fiscal benefits and tax exemptions to the Nokia vendors as was given to NIPL if they jointly invested ₹300 crore within three years of Nokia’s investment (TN Industries Department 2005: 12). None of the Nokia vendors or even Nokia itself

manufactured components in India. Instead they were imported duty free to the factories.

Promise of ‘Flexible’ Labour

One of the attractions of Tamil Nadu, besides the “availability of skilled labour” was the “flexibility of labour law” promised by the state government (GoTN 2005). A clause in the MoU specified what was on offer to the company including the “flexibility to hire the workforce without any restrictions and conditions;” enabling the “SEZ site to be a ‘public utility’ to

Table 1: Operational SEZ Units* Inside Nokia Telecom SEZ

Name of Unit	Investment (₹)	Production	No of Employees
Nokia India Pvt Ltd	> ₹1,400 crore***	Mobile phones	11,761**
Liteon Mobile	385	Mobile panels	3,000
Salcomp Manufacturing India Pvt Ltd	100	Chargers	3,100
Wintek Technology India Pvt Ltd	67		943
Laird Technologies India Pvt Ltd	60		450
Foxconn India Pvt Ltd	375	Mobile panels	5,100

* Between 2007 and 2014, Nokia had several component supplier companies inside the Nokia Telecom zone and two suppliers—Build Your Dream (BYD) and Flextronics—were located outside the Nokia zone and operated independent SEZ units. Some of the units such as Jabil, Laird, Wintek, Aspocomp closed their factories between 2009 and 2011.

** Includes 2,272 contract workers.

*** Although Nokia Telecom SEZ was showcased as a “success” story of SEZ policy in terms of investments, with Nokia claiming to have invested ₹1,381.67 crore till 2012 (MoU 2012), a scrutiny of the company’s (NIPL) balance sheet for April 2012–March 2013 revealed that the company had an accumulated surplus of ₹6,602 crore, while its capital investment (since 2005) had only been ₹35.4 crore. Meaning the company had an accumulated surplus of 188 times more than what it had actually invested. (Interview with Thyagu, private financial consultant and company secretary, 26 June 2014).

Source: Letter from Petra Terasaho, Director (Finance & Control), NIPL to the secretary to Government of TN, Industries Department. Dated 19 January 2011. Copy of the letter obtained under Right to Information Act 2005.

curb labour indiscipline;” the “flexibility in employment conditions (including working hours for women ... allowing the employment of women in night shifts)” (TN Industries Department 2005: 10). While some of these were granted under the SEZ Act itself, the Tamil Nadu government also “allowed” women to work on night shifts, a provision that is still restricted in many states of India.³ This was perhaps an important incentive for Nokia and its suppliers looking to hire women workers in factories that operated three shifts a day including night shifts (Varadarajan 2008).

“Flexible labour” regimes have been hallmark of the zones. Ong (1991: 280) describes zones across Asia and in Mexico as a complex mix of “labour relations and cultural systems,” “high-tech operations and indigenous values,” where disciplinary techniques, constant surveillance and suspended labour rights instil “productivity” and “political stability”—conditions favourable for the global manufacturing sector (Ong 2006). Although under the central SEZ Act 2005, individual states cannot alter labour regulations, especially to do with “matters relating to trade unions, industrial and labour disputes ... applicable under SEZ Act” (Singh 2009: 7), if one looks closely at the SEZ policies and SEZ Acts legislated by individual states it is clear that modifications have been made to labour regulations to attract SEZ investments, especially to the Trade Union Act, 1926 and Industrial Disputes Act (IDA), 1947 (ILO 2012: 22). For instance, the Tamil Nadu SEZ policy promised to classify all industrial units in the SEZs as “public utility service” under the

IDA, 1947. This essentially meant, as per section 22 of the IDA, prior notice of a strike has to be given and no strikes can be conducted during the conciliatory process in a public utility service. A prior notice of a strike almost immediately starts a “conciliation” process mediated by the labour department that continues over a long period of time. And if a strike is conducted during the conciliation process, the state has the power to declare it as “illegal” and both state and management often take harsh action against striking workers.

The International Trade Union Confederation (2007) in its survey of the violation of trade union rights in India noted the difficulties in unionising in SEZs due to restrictive entry to the zones. However, it should be noted that this sort of restricted entry of trade union activists to factories is not new. It was prevalent in Tamil Nadu even before the SEZs were established, especially in textile industries (ILO 2012: 36). In the case of Tamil Nadu a certain amount of “flexibility” with respect to labour was already in place before the SEZ laws were enacted, which perhaps might have been an “added” attraction for global corporations such as Nokia to set up its factory in the state.

However, despite all the barriers, in 2011, six years after the factory started, the permanent workers of the Nokia factory formed an independent employees’ union: Nokia India Thozhilalar Sangam (NITS). The formation of the union was preceded by two major sit-in strikes by the workers inside the zone in 2009 and 2010 respectively. As Beverly Silver (2014: 48) writes “labour unrest is an endemic feature of historical capitalism” and that with the geographical shift in the location of production, labour unrest has also shifted “over time, together with the rise or decline of new leading sectors of capitalist development.” Therefore, despite the process of “globalisation,” that has arguably fragmented the labour force and undermined its capacity for class-based mobilisation, workers have nevertheless mobilised and resisted global capital in new geographical locations (Silver 2003, 2014; Zhang 2015). It demonstrates the ability of labour to “unfix” capital’s strategies for maximising profits in different locations across time and geographic locations.

Gendered Labour Recruitment

In early 2005, when the senior managers of Nokia started planning to set up the factory near Chennai, the preference was for hiring young women. As a senior manager from the factory had said: “while we couldn’t discriminate, we were hoping boys don’t apply much ... we wanted girls.”⁴ This preference was driven by an expectation of a disciplined worker, who was young, preferably female, and whose “docility” and “finger dexterity” made her an “ideal” candidate for hyper efficient, flexible, lean, just-in-time production. As Melissa Wright (2006: 25) points out: “With[in] virtually every multinational firm in the electronics industry, managers hire women to work on the assembly line on the assumption that they are the best electronic assembler because of their famous “dexterity,” “docility,” “patience,” “attentiveness,” and “cheapness.” In a study done amongst the women workers in the electronics factories in Delhi, Amrita Chhachhi (1997: 4) found the bulk of

the women workers to be “young, just out of school, their first job and first venture outside the security of home ... Managers called them ‘fresh and green’—like vegetables—their youth would be consumed in producing consumer items few of them could afford to buy.” Researchers have long exposed the myths around the “suitability” of women to perform certain types of work that involves tedious, repetitive and monotonous actions purportedly due to their “natural” attributes for manual dexterity, “nimble fingers,” and inclination to “accept tough work discipline,” etc (Elias: 2005; Elson and Pearson 1981; Fernandez-Kelly 1983; Ngai 2005; Ong 1987; Salzinger 2003; Wright 2006). Nokia’s human resource manager for recruitments had explained why they preferred young women:

We have 60:40 female to male workers ratio. Do you know why? Because of (the) nature of work. We look for finger dexterity, hand eye co-ordinations, hand steadiness. These are extremely repetitive jobs. They (women) are better than men. Women are naturally good at this. This is scientifically proven. There are minute screws. There are 1,024 components in mobile phones that need to be assembled to make the phones. Women have all these natural skills to assemble. All Nokia mobile phone manufacturing facilities hire more women than men because of this reason. We (have) been hiring women workers.⁵

The manager’s statement illustrates the enduring nature of the myth that keeps circulating amongst the corporate managers of global firms who through discourse and practice construct a worker subject—an ideal working body that can suitably deliver their expectation. It shows complex interplay of discourse and practice with the “structure of relationships” (Connell 2005) that come together as a powerful mechanism to construct a “disposable third world woman’s body ... that combines bits and pieces of workers’ bodies with industrial process and managerial expectations” (Wright 2006: 45). A feminist lens on the nature and relation of women’s employment shows how comfortably capitalism and patriarchy accommodate each other (McDowell and Massey 1994) to create women as “second-class workers.” Feminist scholars argued that women entered the labour market “already (pre)determined as inferior bearers of labour” (Elson and Pearson 1981: 94). Saraswati Raju (2010: 1) points out in the case of India, “a gendered location remains the primary axis along which exclusion and marginalization continue to take place,” even while other factors such as caste, class and ethnicity intersect (also see Kapadia 1995; Kapadia and Lerche 1999). As Connell (2005: 71) argues “globalisation of gender” can be understood in terms of “the structure of relationships that interconnect the gender regimes of institutions, and the gender orders of local societies.”

Recruitment Strategies

Nokia launched its factory in Tamil Nadu with 200 workers in January 2006. Numbers rose quickly to 4,000 in a span of two years and by the end of 2012 there were 12,500 workers. Nokia managers and its recruitment agents penetrated the rural labour market by using state agencies and regional political parties. There was geographical preference for not hiring from within the surrounding villages for “fear” of collectivisation and local community support for workers as was revealed by

the recruitment agents. Preference was also not just for hiring young girls, but also specifically those who had not done well in school exams. Managers and recruitment agents assumed that the aspirations and expectation of school “failures” would be lower than those who had scored better marks. This was also a strategy to retain workers and lower the attrition rates (turnover) of workers, based on the assumption that people with lower marks will not aspire or have too many options to move to other jobs and remain factory workers.

Workers on permanent and temporary contracts were hired to meet the production demands along with trainees and apprentices. The HR managers expressed the challenge of balancing a labour force that would give optimum productivity without exposing the company to the risk of maintaining extra labour force (Wright 2006). The idea was to keep the system lean.

There was an elaborate network through which labour was recruited for the company, including state government schemes, state- or political party-sponsored “job fairs” or through recruitment agencies. The minimum age of entry for a worker was 18 years, with a school pass certificate, and the average age of workers in the factory was 24 years. There was another category of short-term workers who got recruited through a government-sponsored scheme: Diploma Apprentice Trainees (DAT). “This is all customised. Under the scheme government pay(s) 50% of the cost ... my costs get addressed, my technical needs get addressed ... government is supporting, I am getting benefitted,” explained the HR manager. In 2012, Nokia recruited 100 workers through this DAT scheme.

The company targeted rural areas and small towns for its recruitment drives including some of the peri-urban areas surrounding Chennai city. They had “labour catchment areas” in eight districts⁶ of Tamil Nadu according to the HR manager.

The managers explained that the areas were chosen on the basis of the number of government schools present in the area. “It’s purely based on number of schools and number of students studying there. So these are the areas where the number of schools are very high and the resource (labour) availability is also very high,” said the HR manager. Adding that wherever there were already established industrial belts, for instance, places like Coimbatore, the company did not conduct recruitment drives, as “people prefer to get local employment.” Nokia had a “school tie-up” programme through which it organised training for students in senior secondary government schools. The schools were approached directly by the company officials. The HR manager explained how it was done:

It is through (the) head masters. So the students will be in their 12th standard, we have contract agreement, so we sign up with them (schools) and they will identify which are the students that are looking for employment after +2 (school pass examination). Then we will train all the students in mobile phone manufacturing techniques... in schools itself. We give them certificates...after 18 years of age if they want to join (the company) they can approach us. It’s not compulsory....you can’t push that (recruitment) otherwise government will kill us.

The manager candidly explained that the training in school were also part of a strategy to “position your brand in the

student community and then you are getting the people for the job.” The headmasters of the schools played a key role in the labour recruitment; “these schools can play a role in getting the desired number[s] throughout the year,” as per the HR manager. The preference for government schools was with the assumption that children from lower income (and lower caste) families would study in state-subsidised government schools and would be more likely to look for low-skilled, low-pay work in the factories after school than others who may have more options. As Elias (2005: 210) noted in her study on Malaysian garment export factories “Far from being a scientific/objective process, recruitment represents a highly gendered and racialised everyday international business practice, and constitutes the key mechanism through which localised social inequalities and hierarchies are reproduced within the workforce of the firm.”

Two agents from a Chennai-based recruitment agency hired by Nokia explained the networks through which the company recruited workers. One was through job fairs organised either by the recruitment agencies with the help of local village or town panchayats, or sponsored by state government or political parties. The recruitment agents explained:

We have established networks in different districts (of Tamil Nadu). In panchayat (village or town level government body), NGOs (non-governmental organisation), district employment officer, government schemes—*Vazhaledu Kattuvoam*,⁷ self-help groups. Pamphlets are distributed with information on age (minimum 18 years) and qualification requirement (school pass certificate), date and venue for recruitment. The venues are usually government schools or community halls. Information is also displayed on the notice boards of district panchayat offices. The panchayat president helps in spreading the word and sometimes the help of district collectors is also taken.

The agents explained that they collected information on the number of government schools in an area and school pass out rates. “We prefer government schools, they mostly have BPL (Below Poverty Line) students. Private (school) students won’t come to work for Nokia,” they reasoned.

Educational Qualifications and Caste

Besides poverty, the educational background of the parents of potential candidates was also a factor that the recruitment agents carefully scrutinised. The logic was that “educated parents won’t send their children to the factories to work” and would prefer them to enter higher education. The other determinant for recruitment was the academic scores of students in their school passing exams. “If they get high marks, we don’t prefer to hire them, since attrition is high. We need people with lower marks,” said the agents. They reasoned that students who got higher marks after joining the factory soon quit since they aspired for higher education or better jobs. Therefore certain characteristics of labour were predetermined in the recruitment strategies of the managers and agents who deliberately targeted groups whom they imagined could be easily controlled, based on the assumption of their disadvantaged position in society.

Both Nokia and its agents maintained that they did not have any “particular caste preference,” however as the recruitment agents explained:

People from forward castes, backward castes, other castes do not come (or send their daughters) for night shift work. People from most backward caste (MBC), Scheduled Castes (SC) and Scheduled Tribes (ST) come for night jobs ... its because of the economic situation. Sometimes even other caste people will also come if they are economically very deprived. Only 2-3% people from well-off family come for these jobs. We get more people from Thiruvannamalai—SC/ST people there, also Perambalur, Virudhanagar. Sometimes Nokia tells us where to get people from.

While there may not be any stated caste preference in the recruitment strategies of Nokia, it is important to note that BPL families and candidates with lower marks, whose families were less educated or who are socially and economically disadvantaged, were perceived as the ones who would send their daughters to do factory work or work in night shifts. Also the recruitment agents indicated that in certain areas with larger Scheduled Caste and Scheduled Tribe populations, there was more likelihood of recruiting workers.⁸ In their study of the nature of the social fragmentation of labour in northeast districts of Tamil Nadu (for instance in Villupuram from where Nokia used to hire as well), Isabelle Guerin et al (2015: 124) also noted that in recruitment strategies “one rarely recruits someone who is higher up in the caste hierarchy.”

Gendered Skill Tests

In the recruitment drives, candidates were given a set of skill tests to perform, which the Nokia HR managers were convinced women had a “special” ability to perform. These included a set of aptitude and manual exercises. The tests were supposed to indicate an individual’s performance and attitude to work “in [a] monotonous environment, how they are handling their stress situation and stressful task and accuracy and speed ... and be attentive and following instructions ... whether they are able to follow the instruction whatever their line managers [gives].” A set of neuro-muscular tests assessed an individual’s hand-eye coordination, finger dexterity and gross manual dexterity. There were three sets of tools that tested the hand steadiness, ability to handle small objects in less than 75 seconds like putting thin metal rods in different sized holes without touching the sides; hand and eye coordination while moving two levers to draw a line in the middle of a blank sheet. I was struck by the “skilful” tests that the women had to undergo and qualify to get the jobs that were considered “semi-skilled” or “unskilled.” Elias (2005: 209) has identified that these tests feature in highly gendered recruitment strategies that lead to the “crowding of women workers into the lowest paying, lowest status jobs within the factory, not least because of the way in which recruiters construct the manual dexterity skills displayed by female workers as innate/natural, and thus not deserving of higher rates of pay.” According to Elias (2005: 209) recruitment practices can be viewed as “a primary mechanism through which Taylorist management processes are neither ideologically nor gender neutral, embodying both the needs of the business to secure low cost ‘nimble

fingered’ labour and also the requirement for ‘docile and diligent’ workers.”

In Nokia’s recruitment strategy we find gendered practices and discourse intersecting with local caste and poverty indexes to predetermine a certain kind of labour suitable to meet the production logic of the company. Couched in the language of women’s ability and skills to perform certain tasks better than men, the managers of Nokia reproduced the globally circulating myth of the third world women’s body that meets the expectation of capital both in terms of accumulation and also as a disciplined workforce.

Production Arrangement and Labour Process

The core elements of the production arrangement in Nokia was characteristic of global manufacturing practices: “a leaner version of mass production paradigm, that is, a Taylorist/Fordist mass assembly production system combined with lean production techniques” (Zhang 2015: 83). Sophisticated “scientific” techniques such as “hand-time analysis” combined with Japanese industrial efficiency known as “Kaizen” (continuous improvement) were amongst the management strategies deployed to manufacture millions of mobile phones in the Sriperumbudur factory. They combined these techniques with a young (predominantly female) workforce, working in three shifts, to “maximise output” and “minimise waste.” Workers were encouraged to compete and awarded for giving ideas for making the work process more efficient.

The Sriperumbudur plant manufactured two models or series of Nokia phones: the s 30 series, which were cheap and popular basic phones, and the s 40 series, which were feature phones sold in the marketplace as the Asha series. During the period of my fieldwork inside the factory in different intervals between August and December 2013, approximately 4,100 people worked per shift on the shop floor, including operators, who were permanent, trainee and temporary; apprentices; technical trainers; technicians; team leaders, and group leaders (management category).

The shop floor of Nokia structurally resembled a huge warehouse of approximately half a million square feet divided into sections. It housed a warehouse operated by an outsourced logistics company called CEVA, a shipping area and phone assembly areas, Engine Operation (ENO) and Supply Operation (SOP). Most of the assembling was done manually except for some stages in ENO, where the microchips were mounted on circuit boards.

Work was minutely divided into multiple stages. In some of the lines, the production output was as high as 600 phones an hour. Hands never stopped moving in these lines. Workers did not lift their eyes up as their hands moved rapidly fixing covers, inserting memory cards, sticking labels. I noticed that in quite a few stages visual checks of component parts had to be done before assembling. Workers had their heads bent over the workstation most of the time while they spoke or joked with each other. The work was repetitive, eyes and hands were in continuous motion taking components placed on the shelves in the front of the table, assembling them and then passing the device on to the next stage.

Workers had to stand at all the stages of the work. Even in the electronics assembling plants in China which otherwise are notorious for hard work conditions, workers sit on chairs or stools while working on assembly lines. To stand and work for eight hours a day was a particularly hard condition of work that workers in Nokia often complained about.

Producing 'Working Bodies'

Positioning bodies in assembly lines, disciplining them through rhythms of work in shifts and time tables and producing "social order" were some of the shop floor techniques employed to produce working bodies suited for a hyper-efficient manufacturing process. On a shop floor of over half a million square feet, these techniques sought to arrange young working bodies to produce 5,00,000 mobile phones a day. Bodies were "tuned" to the rhythm of work through timetables and shift work patterns. There were seven shift patterns in the factory with shift changes every week. The "teams" worked in various permutations and combinations in different shifts every week that changed every six months when the teams were reshuffled and the shift patterns changed.

Workers resented "reshuffling" of lines. This meant teams would be rearranged, friends in line would no longer be working together and the possibilities of even meeting each other would be remote. It was a torture according to the women. A junior manager had once jokingly said, "love affairs break up with the change in shift patterns." For women (and men) having friends in the shifts and line, being able to chat, joke and laugh was part of the coping mechanism to stand and work for eight hours. Change in shifts also meant ruptures in "line" solidarities. While shifts and lines were managerial disciplinary techniques, they also were the sites of friendships, solidarities and subversions for the workers.

Assembly lines were also sites of fierce competition amongst workers. This was driven by managerial strategies for increasing output, that is, through incentives, gifts, persuasion, and workers' feelings for their work or pride in doing work well. These evoked strong line competition amongst workers to outperform each other. Burawoy (1979: 27) argues that "consent" arises in the way activities are organised on the shop floor that presents the workers with choices—"as though ... with real choices" and "it is participation in choosing that generates consent." The competition between lines would be so fierce that workers would even check the production boards of other lines to "out-perform." Production boards were prominently displayed at the beginning of each line that created intense competition amongst workers. Workers often competed enthusiastically and innovatively to achieve the target and more. There was an immense sense of pride in recognised as being a "Smart Operator." Workers also did "banking" (Burawoy 1979) when they produced more than the hourly target output to stock up for the next hour to gain extra break time.

If there was one thing about the factory work that the workers, especially women, disliked the most, it was the night shift. They resented it and feared it would affect their health. But despite being torturous, women also claimed that they had

"jolly" time during night shifts when most of the management staff were not in the factory and it was easy to bend rules, alluding to the "slippages" and temporal nature of power that circulated in the shop floor. There were also certain places in the shop floor where women bent disciplinary rules. A rest-room in one of the sections was a particularly favourite place for women workers, where they sneaked out and slept on the stairs during night shifts, and sometimes also took quick rest during the day shifts. There were as such no places for the workers to sit and rest.⁹ When production volumes were low, workers would often sit on the floor, play games (specially during night shifts) and quickly stand up if they saw an HR manager walking past. Workers were also aware of the "electronic eye" (the surveillance cameras) fitted on top of each line and almost in every section of the shop floor, silently watching them. Defying discipline was part of their coping mechanism on the shop floor.

Producing Subjectivities and Counter-subjectivities

On the shop floor, there was another form of managerial control that was at play besides the bodily disciplining: the creation of a familial feeling through "workers engagement" (Elias 2005). A mix of traditional managerial practices were used along with various "engagement programmes" to produce familial feelings in the factory (De Neve 2001; Lynch 2007; Hewamanne 2008; Wright 2006). However, most of the activities were stereotypically "feminine" and couched in the language of "empowering" the women. For their part, women participated in the management's programmes, but were clear about what they wanted. "It's fine that they are giving us all of these things. But what we need is an increment, a better salary. We are working for that," Beula, one of the workers had said. Workers produced their own counters to the managerial notions of family by forging friendships, solidarities, nurturing, falling in love, and emotional attachment to the workplace which disrupted the smooth narratives of the HR managers.

Loss of Work

In 2014, after operating for eight years, the Nokia factory closed down. A series of events took place from the beginning of January 2013 that eventually led to the final closure of the factory in November 2014. It started with an income tax raid in the factory, charges of tax evasion against Nokia, both by the central and state governments, followed by the global sale of Nokia's Devices Division to the United States based Microsoft Corp. While the official narrative of how the events unfolded leading to the closure is linear, for the workers it was not a linear process, it was confusing and chaotic. Ironically, the timing of the trouble in the factory coincided with the much celebrated wage settlement between the employees' union (which represented only the permanent workforce) and the management.

For the workers, most of who had joined the factory right after school, the closure meant more than just loss of job. A disruption that was created by the uncertainty of capital, fear for the present (and future), emotions ranging from disbelief to anger, anxiety to bitterness drove deep wedges into the

collective that had once stood united facing the state and the corporation. While the workers expressed a sense of anger, grief and loss to the factory closure, they also conveyed a strong sense of “indebtedness”—“Nokia must take the responsibility for us.” There was a strong feeling that the company owed them not to be treated this way. The workers disapproved the company’s decision of closure—they did not “consent” to it. In some sense they demanded their rights by drawing on a language of responsibility and indebtedness. In the everyday practices and lived experiences of work, people form complex feelings towards workplace—identity, community, way of being, where work means “more than just a job.” However, labour’s attachment to this space is not necessarily unproblematic, and can become an impediment in the larger politics of labour. In trying to protect the “space,” workers can become insular. It also shows that this space is not necessarily experienced in the same way by all workers as there are internal divisions within, often created by conditions of employment and nature of work.

In case of Nokia, women and men responded to the disruption in their lives caused by the factory closure both individually and collectively. Collectively through their union, workers engaged in court battles with government officials, political leaders, and developed public strategies to reach out to a larger audience, whereas individually workers struggled with their own sense of loss, which was economic, emotional and social. While there was a difference in the individual and collective actions of the workers to the factory closure, they were interrelated in terms of their collective desire to protect their dreams for a better future that the waged work in the factory promised them. As Bergene and Endresen (2010) notes, in order to understand labour’s response, it is important to understand labour’s agency as part of their everyday struggles, shaped

by its relationship to capital and the state. This relation, or the nature of it, changes with the changing local–global processes, dynamics between state–capital and how labour then tries to create its own space within this contested relational space.

While, it is now well established that “geographical effects of capitalist production are always spatially uneven” (Cumbers et al 2008: 373), the “restructuring logic of capital” (Harvey 1982 and Smith 1990 in Cumbers et al 2008: 373) produces conditions where workers in different places and times can or are able to extract concessions from capital or are able to “improve its share of surplus value” (Cumbers et al 2008: 370). However, this then perhaps creates contradictions where the material interests of a small section of labour coincides with those of capital for a period of time (Cumbers et al 2008: 373) which then may not allow for the formation of larger class interests. Therefore, when the flight of capital takes place in search for profitable pastures or as Harvey (1982) says for a spatial fix, workers may often find it difficult to form broader class solidarities or build unities.

Conclusions

The case of Nokia sez has shown that while on the one hand the state’s active promotion of corporate-led industrialisation policies promising employment and better future created aspirations and expectations amongst the young workers, on the other hand these policies are short-lived and impact negatively workers who stand to lose not just their livelihoods but even future possibilities of work. There is no accountability or labour-centred exit policy factored into the state’s industrial policies when state governments welcome private investments. Therefore, while corporations can quit operations at a point when it is no longer profitable for them to continue, for workers the impact of such closures is profound.

NOTES

- 1 CAG’s 2007 report had noted that in 1996 when the land in the area was acquired by the state government, the compensation paid to the farmers was between ₹4 and ₹14 lakh/acre of land, whereas the same land was leased to Nokia at a concessional rate of ₹4 lakh/acre, causing a loss of ₹7.4 crore to the state government (Dutta 2009: 24).
- 2 On an average, the plant produced anywhere between 3,00,000 and 5,00,000 handsets a day during peak demand periods (between 2009 and 2012), including at times 6,50,000 in a day.
- 3 Under Section 66(1) of Factories Act 1948, women are not allowed to work in any factory “except between the hours of 6 a m and 7 p m” However, this provision under the act was challenged in the Madras High Court in 2000 by a female textile worker from Tiruppur industrial area and an order was passed by the court allowing the Tamil Nadu government to make an amendment to the act allowing women to work in night shifts in the state. Recently the states of Rajasthan (in 2013) and Maharashtra (in 2014) made similar amendments to the act and also amendments are being proposed to the central act. While these changes are being made in the name of “equal opportunity” for women and men, it is important to bear in mind that the global manufacturing chains that demand high volume “just in time”

productions, especially in export manufacturing, also demand “flexibility” in labour regulations, and states often amend legislation to “attract” and “accommodate” these demands.

- 4 Unrecorded interview with a senior manager of NIPL, Chennai, 7 November 2013.
- 5 Interview with resourcing head Nokia India Pvt Ltd, Chennai, 2 August 2013. I conducted two interviews with the HR manager dated 2 August 2013 and 14 August 2013.
- 6 The eight catchment districts for Nokia’s labour recruitment were Kancheepuram, Thiruvannamalai, Thiruvallur, Villupuram, Salem, Vellore, Thiruvallur and Tirunelveli.
- 7 I conducted an interview with the director of the livelihood (skill) development officer of the Vazhaledu Kattuvoam Scheme. “This is a state government–World Bank funded project for the most backward, poorest of households. For direct employment, we organise job fairs for 50–60 youth, the VPRC (Village Poverty Reduction Committee) organises and mobilises the whole thing. We invite 10–15 companies like Hyundai, TVS, Nokia, we organise the fair in a government school, each company is given a separate cabin (room) where they make presentations about the company, conduct tests and on same day selection of candidates are done. So far two lakh people have been trained and employed in these last six years. Some are earning even ₹20,000. Most of the people, 80% are from SC/ST families, really touching the

needy people.” Interview dated 2 September 2013.

- 8 Both Nokia and agents did not divulge any details on caste profile of workers saying that they did not maintain any caste-based data.
- 9 There was a rest area for pregnant women. If anyone was feeling sick, they could not rest there, but had to go to the medical centre. So women wanting some rest would sneak to the toilets to rest. For men, there were no rest areas. They too took refuge in the toilets.

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