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# PATHWAYS TO PROSPERITY AND INCLUSIVE JOB CREATION IN NEPAL

Background Paper: Manufacturing sector

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## INTRODUCTION

### Manufacturing sector trends

Manufacturing in Nepal has seen a steady decline in the past decade. According to the government Development of Manufacturing Industries in Nepal (DMIN)<sup>1</sup> report, the share of manufacturing in GDP declined from 9.0% in 2000/01 to 6.2% in 2012/13 (CBS, 2014). According to Ministry of Finance's Economic Survey (FY 2015/16), this declined even further to 5.5% in 2015/16. According to the report, 'unfavorable investment environment in the industry sector, inability to create amicable labour relation as expected coupled with lack of reliable and regular supply of electricity, prolonged political transition and weakening industrial infrastructures among others' are the principal reasons.

Figure 1. Manufacturing as a % of GDP in Nepal, 2000 to 2015



Source: Ministry of Finance (2016).

Apart from its declining contribution to GDP, the manufacturing sector in Nepal is also undergoing structural change. According to the DMIN report, the manufacturing sector is retreating towards more basic and less complex industries. The share in value-added of the food and beverages sector has increased (from 22.8% in 1996 to 34% in 2011) whereas the shares of textiles (from 25.9% to 3.8%) and wearing apparel and fur (from 6.3% to 0.5%) have plummeted (CBS, 2014). Basnett and Pandey (2014) also point out that Nepal's current manufacturing sector is dominated by low-technology, labour-intensive manufacturing products such as fabricated metal products, grain mill products, vegetable oils and fats, food products, non-metallic mineral products, plastic, beverages, tobacco, and textiles – accounting for more than 80% of manufacturing value-added.

The decline in the contribution of manufacturing to GDP in Nepal is accompanied by the absence of a significant increase in share of manufacturing jobs in total employment.<sup>2</sup> One report also highlights the lack of structural change towards better jobs in the manufacturing sector (Islam, 2014). It also points out that the employment intensity of growth in large-scale manufacturing is found to be negative – which is unusual for a country at the stage of development of Nepal currently. In contrast, small-scale industries exhibit positive (albeit rather low) employment intensity of growth, and small-scale garment industries perform relatively better (ibid.). Thus, the creation of quality employment in the manufacturing sector is more likely to come from the development and promotion of small-scale industries.

Nepal's manufacturing sector is currently governed by the Industrial Policy 2067, implemented in 2010 to replace that implemented in 1992,<sup>3</sup> which was unable to accelerate the development of industrial sector

<sup>1</sup> The DMIN report is a joint collaboration of the Central Bureau of Statistics and the UN Industrial Development Organization.

<sup>2</sup> The share of manufacturing increased marginally from 5.8% in 1998/99 to 6.6% in 2008 (CBS, 2008).

<sup>3</sup> The industrial sector's contribution to GDP ironically started declining after its implementation.

within the long period that it spanned. The current policy aims to increase industrial activities, expedite employment creation and increase income levels. Its salient features include assistance to increase exports of industrial products, development and acquisition of new technologies, promise of a flexible labour policy to promote industrial relations, promotion of industries that use local resources, promotion of green industries, creation of institutions to strengthen industries, protection of industrial IP rights, creation of an investment-friendly regime and promotion of micro enterprises, cottage and small industries. Despite promising features in relation to the acceleration of industrial development, the industrial sector has been declining even since its adoption, most likely because of poor power supply,<sup>4</sup> political unrest, Indian blockades, earthquakes, etc.

The other Act that affects the manufacturing sector is the Industrial Enterprises Act 2073 of 2016, which lays down provisions for registration, licencing mechanisms, classification of industries, national priority industries and facilities afforded to different industries. Some of the provisions related to the manufacturing sectors are:

- 100% income tax exemption for the first five years and 50% income tax exemption for the next three years for manufacturing industries established with capital investment of more than NPR 1 Arab (roughly \$9 million) and offering year-round employment to more than 500 Nepali people.
- 25% income tax exemption for manufacturing firms that export (from the income earned through export).
- Income tax exemption for firms depending on the number of employees as well as whether many workers are women, from disadvantaged groups (Dalits) or disabled.
- No registration fees for small enterprises.
- 35% discount in registration fees for industries owned by women.

Another recent piece of legislation that aims to accelerate industrialisation is the Special Economic Zone Act (SEZA) 2073, of 2016. SEZA aims, among other things, to promote export-oriented industries, increase the competitiveness of export-oriented goods and services and attract FDI. It makes provisions for industries located in the SEZ to obtain attractive facilities and assistance, including tax holidays like customs duty exemptions, income tax exemptions, VAT exemptions, etc. as well as better access to infrastructure. It also offers attractive foreign currency facilities, Visa facilities and a one window service to create a better environment for attracting FDI.

In terms of employment creation, the National Employment Policy 2071, implemented in 2015, replacing the Labour and Employment Policy 2062 enacted in 2005, is the key policy document governing all sectors. Its primary objectives are to create harmony between various sector-specific policies, improve the quality of the jobs, make the Nepali labour force competitive and strengthen the labour market by increasing the use of a research-based modern information system. Its major policies regarding the development of the manufacturing sector are to promote a one-stop-service system through online services to ease the establishment of industrial services; encourage industries based on local labour; attract FDI in production subsectors that have high potential to create productive employment; increase labour productivity; improve industrial relations, etc.

Other relevant policies and laws for the manufacturing sector are those that govern labour market practices. The most important of these are the Labour Act 2048 (1991) and the Labour Rules 2050 (1993). The Labour Act is the main document governing provisions related to labour rights, facilities and safety of workers and employers. This legislation controls the termination of employee services as well as some other provisions, like prohibition of engaging non-Nepali citizens at work<sup>5</sup> (Section 4A); annual increments in remuneration (Section 21A); and prohibition of the deduction of remuneration (Section 24). The Labour Rules complement the Act by laying out rules on security of professions and services; remuneration and welfare provisions; measures relating to health, cleanliness and safety; and provisions

<sup>4</sup> The power supply situation has drastically improved recently.

<sup>5</sup> Foreign workers can be hired only if it is found that a Nepali citizen would not be available for the skilled technical post needed (Section 4A, Article 3, Labour Act 1991).

relating to committees (labour advisory committees, labour relation committees) and authority (labour officers, factory inspectors, welfare officers).

Other relevant regulations that govern labour market practices and hence are applicable to the manufacturing sector are the Trade Union Act 2049 (1992) and the Trade Union Rules 2050 (1993). The Trade Union Act governs the management of trade unions, including registration and operations, and contains other provisions relevant for the protection and strengthening of professional and occupational rights. The Trade Union Rules lay out the necessary rules for the implementation of the Act. These trade union regulations are often criticised as being a hindrance to manufacturing sector growth, as they allegedly provide excessive power to trade unions to solve labour disputes.

## SURVEY RESULTS

A survey of 10 light manufacturing firms was carried within both Kathmandu and Biratnagar. Firm typologies were highly varied and covered several subsectors, including shoe manufacturing, pharmaceuticals, garment manufacturers, polymer producers and small industrial machine producers. As part of the wider project, the survey team interviewed firms across four sectors, selected on the basis that they are important for structural transformation (good growth potential, good productivity, export-focused and able to employ significant numbers) for balanced, inclusive growth across the country. The sectors chosen were tourism, ICT, light manufacturing and agro-processing. This report presents detailed key findings from the interviews and policy recommendations for firms in the light manufacturing sector.

Firm-level surveys were carried out in January 2017, covering 43 firms located in Kathmandu and in Biratnagar. A semi-structured qualitative questionnaire was used to explore firm constraints (both demand and supply side). Note that the same questionnaire was used for all sectors.

From a methodological point of view, it is important to note that surveyed firms do not represent a stratified sample of the four sectors, either in Nepal or within the survey sub-regions, as the final representation is largely composed of firms that responded positively to queries during fieldwork. It is therefore important to note that the survey results should be used as indicative rather than as representing an authoritative view of the four key sectors.

### Firm characteristics

Firm size ranged from small firms with six employees to the largest firm employing approximately 4,000 people. The interviewed manufacturing sector firm average employee count was of 552 employees, with an average of 168 employees when the outlier (GoldStar Shoes) is removed from the average. Only 50% of firms were able to provide an estimate of growth in employment. Those that did demonstrated 2.91% annual growth (on average) in employment, though the removal of GoldStar Shoes changes the remaining average to -1.27% annual growth. The limited nature of the sample size means this does little to provide a robust back-up to other relevant findings but the sample does follow the same negative trend in manufacturing employment.

All firms stated that they were considering growth plans, dependent on demand for their products. Growth plans fell into two categories: expansion or diversification. Expansion plans mainly revolved around the national market – that is, increasing domestic market presence (rather than actual production facilities) or diversifying into production of different products either vertically or horizontally within the same value chain (i.e. production inputs or alternative products).

## CASE STUDY: GoldStar Shoes

GoldStar Shoes is one of the largest shoe-making firms in Nepal, with a flourishing export market in India. The firm currently employs 4,000 people and, counter to the general manufacturing sector trend, is expanding both operations and its number of employees. The firm produces casual/sportswear shoes at a low price point (in comparison with international brands such as Nike or Adidas), at typically around \$4 per pair.

Although the firm is notable for not only being one of the largest manufacturing companies in the country and for its export market orientation, of greater interest is the fact that it is considering expanding operations to incorporate both lower- and higher-value segments of its value chain. It intends to set up a manufacturing plant aimed at producing critical inputs such as PVC, which would also be used as inputs for other manufacturing sector firms. On the higher-value end, it is looking to expand operations to target the higher-value shoe segment of the market – although it is currently constrained by a lack of skilled designers.

## Constraints

Reported growth constraints are highly heterogeneous, hence a ranking of these would not prove representative of responses. However, interviewed firms cited several common constraints, highlighted below, divided into labour constraints and operational environment constraints.

- **Infrastructure:** Unlike for firms in Kathmandu, which cited electricity supply as (currently) stable, interviewed firms in Biratnagar cited lack of electricity as a major constraint. Firms in both regions saw limited transport infrastructure and connectivity (especially within country) as a major constraint to growth. Scarcity of electricity and poor transport were both linked to greater operational costs and longer production timescales.
- **Legal framework:** Labour strikes and trade union disputes compounded by government instability and limited changes to the labour law (especially in terms of labour hiring and firing) were cited as potential growth constraints. Firms said they were finding it difficult to let go of underperforming employees given the laws governing employment termination in the country. To this end, those firms that could were considering greater investment in capital (rather than labour) to reduce labour-induced problems within their firms.
- **Migration:** High turnover rates caused by employee migration abroad are causing two main problems for light manufacturing firms. The first relates to availability of labour, with a few firms reporting either shortages in the labour supply or a constant need to hire new workers to replace departing workers. Related to this issue is the fact that firms cite the need to spend time and resources training replacement labour, which represents a cost and time burden.
- **Limited research and development (R&D):** The R&D capacity of Nepali firms is severely limited by the lack of availability of local designers and product researchers. Local firms that want to diversify their product ranges must rely on foreign designers, as the local market does not provide an adequate domestic supply. The effect of such a constraint is that firms have difficulty expanding their range of products, meeting international production standards and ultimately being able to increase their output value addition.

## Government and business association support

Interviewed firms did not provide a significant range of potential government support policies, with approximately half the responding firms not convinced that government could offer any kind of support – stemming either from a lack of trust in government or from a lack of cooperation between manufacturing firms and the government. For the remaining firms, desired government support is highlighted below:

- **Labour law reforms:** Surveyed firms wanted to see changes in the labour law in order to reduce the amount of labour disputes and simplify labour termination procedures.
- **Transport logistics:** Improvements in transport infrastructure were seen as necessary to expand domestic market access and help reduce the transport costs both for production inputs and towards intended (local or international) markets.

- **Energy:** Although firms reported varying degrees of satisfaction with the current energy supply, improvements in the reliability of electricity as well as reductions in energy prices were cited as potential government intervention areas.
- **Financial support:** Some firms believed better financial support, through tax incentives, reductions to bank collateral, etc., could be provided to help grow the sector.

Beyond improvements in infrastructure, it is unclear what light manufacturing firms would, themselves, require from the government. Financial support is almost certainly a given ‘answer’, and is already accounted for by the ‘Special Industries’ classification within the Industrial Act – although the practical availability and actual disbursement of tax rebates could be further investigated. Labour law reforms were also cited (simplified hiring and firing procedures, especially aimed at employee termination procedures and timescales, which were cited as both very difficult and lengthy), although it is unclear if this is a real constraint to growth. There may be merits to an investigation into reforms that simplify justified employment termination procedures.

Collaboration with government ministries and agencies relates to process (i.e. obtaining permits, licences, paying taxes, etc.). Direct interaction is for firm-level problem resolution, mainly of labour disputes. Lobbying activities are carried out through business associations. At the national level, most firms are associated with FNCCI. At the sectoral level they are also members of their subsector associations, such as the Garment Association of Nepal and the Nepal Pashmina Industries Association.

Most firms reported good working relations with these associations although they were often not particularly impressed with results. However, they attributed slow (or no) lobbying outcomes not to inefficiencies within the associations but rather to slow government responses to policy change requests.

## Worker profile

The typical light manufacturing worker profile was of a 38-year-old male with limited education (typically no higher than high-school), although light manufacturing firms often had a split in terms of line-workers (approximately 85% to 90% of labour) and technical staff (between 15% and 20% of staff) who tended either to be graduates or to have gained some form of technical qualification. Females represented an average of 24% of the labour force, and youth under the age of 30 represented 30%. There was limited consensus by respondents in terms of the difficulties involved in hiring women. Some explained that limited mobility and availability to work longer shifts (owing to household duties) meant it was harder to engage women; others either said there was no differentiation between the two or actively encouraged female participation because of their lower tendency to migrate abroad.

An average of 4% of staff represented foreign labour. Those firms that hired foreign work all hired Indian technical workers. This is in line with the stated constraint of a limited supply of technically capable workers. Interviewed firms stated that foreign labour was hired to operate special machinery, provide managerial expertise and carry out product R&D.

Hiring practices were said to be non-discriminatory but also non-preferential towards disadvantaged groups, hence responding firms could not say what percentage of their workforce stemmed from such groups. Two firms did say most of their workers stemmed from deprived socioeconomic backgrounds.

## Skills, salaries and training

Skill requirements are stratified: there are very few for factory floor workers but for technical workers skill requirements are both higher and non-homogenous (largely firm- and process-specific). This is not surprising given the variance in production of interviewed firms, but there is a general requirement across most firms for certain technical skills (i.e. mechanical engineering), other technical skills (such as capacity to operate and maintain machinery) and product design skills (to promote product value addition).

Two factors negatively affect the availability of labour to meet firm requirements. At the line-worker (i.e. factory floor) level, firms have difficulty finding enough workers to fill positions, with the perceived

shortage of labour often attributed to high levels of labour emigration. Shortages in skilled technical labour were also reported, attributed to a limited pool of skilled workers, compounded by emigration. Given that the firms were hiring technical expertise from abroad, skilled worker availability can potentially be attributed to a limited skilled labour pool rather than emigration.

Not all interviewed firms provided salary levels. For firms that did (six out of ten), these were estimated at three levels: junior (less than three years of work in the firm), intermediate (between three and five years) and senior level (more than five years). The following average levels were provided:

- *Junior*: NPR 13,7500 per month
- *Intermediate*: NPR 25,000 per month
- *Senior*: NPR 40,500 per month

Firms that did not provide disaggregated salary ranges stated that most of the workers were paid at least the minimum salary levels. All firms reported annual increases in wages, though an exact estimate of annual baseline wage growth was not provided.

Common across all firms was the fact that training is predominantly carried out in-house, mainly through on-the-job learning processes, though machinery operations and maintenance is often carried out (in-factory) by machine suppliers. Interviewed firms do not carry out certification, skills training workshops and internal knowledge-sharing seminars.

### Light manufacturing labour market tightness

The state of the labour market in the light manufacturing sector presents a typical Nepali situation. Firms found it easy to hire workers at the lower end of the skills range, some difficulties in hiring skilled technical staff and extreme difficulty in retaining staff. From a skills perspective, interviewed firms stated that at the lower end of the skill spectrum there was no difficulty in hiring labour – in-house on-the-job training would provide the necessary (firm-specific) skills. The supply of (technically – i.e. machine operations and maintenance) skilled labourers was perceived as a greater, though still not problematic, constraint. Employees with engineering or technical qualifications were not perceived to have enough practical application experience to overcome this constraint, so firms invest a significant amount of time in providing the necessary experience.

The main constraint is retention of labour, both skilled and unskilled. Labourers are migrating to work abroad, creating a high turnover rate (one firm cited close to 100% turnover per year), negating any time and resources spent training the workers and reducing the capacity for firms to expand operations. The high turnover rate is compounded by (perceived) difficulties in firing unproductive employees, attributed to the current labour law regime. The end result is one where manufacturing firms are considering increasing their use of capital to replace labour. Though it may be premature to ascertain increasing levels of automation in a sector that is, in effect, in decline, this is reflective of global trends in manufacturing where labour is being displaced by machinery.

## CONCLUSIONS: POLICY PRIORITIES

Labour policy targeting the manufacturing sector is unlikely to stand the test of time or meet future sectoral growth requirements if it is geared towards the lowest denominator – that is, the factory floor worker. Given the current and future orientation of the sector towards automation, combined with the sub-sectoral and firm-specific skill requirements, targeting factory floor worker skills is a task better suited to firms themselves. Although manufacturing has been recognised as a driver of growth, its employment intensity has steadily declined, hence growth in manufacturing employment is achieved through overall growth in the sector itself and is focused mainly on technical, rather than basic, skills – a trend that will likely only increase over time. Therefore, policy support should broadly be divided into enabling policies and value addition policies.

- **Research & Development:** Institutional support for the establishment of R&D-oriented tertiary education institutions could generate a specific set of skills that would allow Nepali firms to increase their level of value addition to outputs. Given firm responses on the need to hire foreign firms or consultants to design or research new products, local institutions aimed at fostering product research, development and design that meet internationally recognised standards could help plug the skills gap in the medium term.
- **Engineering and technical skills:** Machine operators and maintenance specialists are identified as harder to find than unskilled labour. Surveyed firms had found that, even though there was a dearth of skilled labour, people could be trained in house, but the cost of replacement, given high turnover rates, was deemed high. Bolstering technical schools to provide practical machine operation and maintenance experience could help increase the skilled labour supply and reduce firm down-time when labour needs to be replaced. At the higher end of the skills spectrum, electrical and mechanical engineers with practical experience are also difficult to source locally. Strengthening tertiary-level engineering courses can be achieved by strengthening practical applications learning modules within educational institutions as well as bolstering internship systems between engineering institutions and relevant firms.

In terms of demand-side policy recommendations, only one is aimed at bridging an existing constraint, through investment in physical infrastructure; the remaining two are less about policy reform and more about understanding the current application of labour laws and financial incentives with regard to their effects on light manufacturing industries.

- **Financial incentives:** Manufacturing firms that fall under the broad range of ‘Special Industries’ classification are already entitled to (variable by employee, firm size and location) income tax rebates. Subsidisation of production under the current WTO Accession agreement, though practically possible, would be counter-productive in terms of export-oriented manufacturing. Hence, current fiscal measures should be investigated to understand why firms are either not aware of, or in receipt of, income tax rebates, as a first step to ensure financial incentives are efficiently disbursed so as to promote production by export-oriented manufacturing firms.

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## ANNEX A: LIST OF INTERVIEWED FIRMS

Sub-sector	Location	Firm name
Soap and cleaning products	Hatauda/Simara	Mahasakti Soap & Chemical
Clothes	Kathmandu	Jyapu Garments
Shoes (sports)	Kathmandu	GoldStar Shoes
Shoes (leather)	Kathmandu	Birat Shoes
Ind. brick making machinery	Kathmandu	Innovative Machineries
Pashmina/cashmere	Kathmandu	Care & Craft
Brown paper and cartons	Biratnagar	Arvind Pulp & Paper
Buckets, stools, plastic kitchen utilities	Biratnagar	Bagmati Plastics
Shoes and slippers	Biratnagar	HiLife Shoes
Plastic bottles; bags	Biratnagar	MM Group