1. What is the issue to be addressed?

Garment manufacturing linked to global supply chains is a large source of employment in many developing and emerging economies. It is also often regarded as a ‘starter’ industry for export-oriented diversification.¹

While for supplier firms integration in global supply chain involves expanded market access and can offer opportunities for upgrading, it also presents challenging requirements and pressures. In particular, in the garment industry, there are increasing trends towards demands for shorter lead times, orders in smaller batches, greater diversity of products and styles, and lower unit prices.

In addition, there are concerns that such trends in sourcing practices may result in negative impacts on working conditions, particularly in terms of long working hours, precarious employment and lower wages. Poor working conditions are in turn an increasing preoccupation for some international buyers, which are expecting their suppliers to comply with certain labour and environmental standards, in addition to delivering on price, time and other primary business considerations.

Nike has several programs in place to assess and train its suppliers with the aim of addressing challenges in supply chain management and working conditions. The focus of this case study is a particular capability building program for promoting lean manufacturing management practices among apparel suppliers.

2. What type of intervention are we talking about?

Nike introduced a supplier capability program on lean manufacturing: it included training on lean manufacturing techniques, promotion of the adoption of lean manufacturing practices, and assessment to certify the application of lean practices among participating suppliers. The objective of the program was to support suppliers in dealing more effectively shorter lead times and smaller order sizes, and in improving their overall efficiency, but it also resulted in improvements in working conditions.

The Nike lean system was an adaptation of the well-known Toyota production system to footwear, and later garment, manufacturing settings.

The Lean system of Nike has several key elements, it involves: identifying core value stream and orienting production around this concept, balancing production processes using takt-time², eliminating waste through reduction of inventory buffers and work-in-progress; increasing operator participation in quality control and problem-solving for continuous improvement; improving operational stability with standardised work and visual management techniques’ (Distelhorst et. al. 2015: 8).

¹ Note: the case study is largely base on Distelhorst et. al. 2015 ‘Does Lean Improve Labor Standards? Management and Social Performance in the Nike Supply Chain’.
² Tak-time is calculated as available time for production divided by consumer demand
Following the development and implementation of the program among footwear suppliers, Nike delivered it to its apparel suppliers. In terms of targeting, the program focused on suppliers with a longer business relationship with Nike, many of which came from emerging and developing countries, including Thailand, India, China, Sri Lanka, Vietnam, Malaysia, among others.

Key steps in the implementation of the program among apparel producers are represented below.

Nike reported a range of benefits resulting from the program in terms of business performance. For example for the financial year 2010-2011, it indicated it achieved:

- 50% reduction in defect rates
- 40% faster lead times
- 20% improvement in productivity
- 30% reduction in time taken to introduce a new model

While the program itself focused on lean management systems and practices, it also led to improvements in working conditions.

Independent researchers analysed data from labour compliance assessment in 304 Nike suppliers in emerging countries (68 of which adopted lean manufacturing practices), to detect whether or not there was a link between the adoption of lean manufacturing and improvements in working conditions as found in the results of compliance monitoring reports for these firms. They looked at
data from developing countries over time both on firms that implemented lean manufacturing and on that who did not, and they controlled for other possible influencing factors.

The analysis indicates that for firms the adoption of lean manufacturing was associated with a 15% point reduction in non-compliance with labour standards, particularly with regards to compensation and working time. The nature of the changes in compliance (i.e. focused on compensation and working hours) suggests that the link between the adoption of lean management practices and working conditions is likely to be explained by the fact that lean manufacturing involves changes in labour and Human Resource practices. In particular lean manufacturing requires increased investment in worker training and higher level of discretionary efforts by workers, since employees in lean systems are expected to perform tasks that go beyond those required in standard mass production systems: for example workers engage in joint-problem solving and play a role in quality inspection at their work stations. The higher level of involvement expected from workers and the investment in employee training in turn means that managers have an incentive in improving working conditions to motivate and retain skilled workers.

A further possible way to explain links between lean manufacturing and improvement in working conditions is linked to management systems: lean manufacturing involves increased management capacities and more effective processes, which can facilitate compliance with certain aspects of labour standards, such as Occupational Health and Safety. The analysis of the data in the study did not detect evidence of such mechanism in the firms reviewed, however other studies do suggest this is an important dimension of the relation between lean manufacturing and working conditions.

Nike’s focus on promoting lean manufacturing in its supply chain has been continuing since the inception of the program. Nike is continuing the capability building of its suppliers and has revised and expanded its Lean program to incorporate elements of Human Resource Management. In addition, Lean management has been incorporated in Nike’s Code Leadership Standard. This is a standard against which Nike suppliers are periodically assessed and rated, with implications for business relations. The adoption of lean manufacturing practices is one of the requirements to qualify for the higher ratings in the scale.

3. Success factors and lessons learnt

Shared value

Nike’s program on lean manufacturing focused on improving firm performance and delivered business benefits while bringing about positive social outcomes in terms of better working conditions. The program created value for multiple stakeholders: it benefitted suppliers, which enjoyed higher productivity, quality and a better ability to meet buyer requirements, it benefitted workers, who saw positive changes in selected working conditions, and it benefitted the buyer, which gained from more efficient supply chains and lower reputational risks caused by poor working conditions. The ‘shared’ value created by the program can be an important factor in facilitating self-reinforcing mechanism of positive changes where multiple stakeholders stand to gain.
Supply chain relations and the role of lead buyers

In sectors such as apparel and footwear, some large lead buyers often enjoy significant influence, especially on first-tier suppliers. The fact that the program is offered by a buyer is an important factor affecting suppliers’ participation. In addition, the fact that implementation of lean practices is verified by the buyer and feeds into a form of assessment is likely to be an incentive in the adoption of lean practices following the training.

In its targeting for the lean program, Nike focused on suppliers with which it had a long term relation. Longer term relations and continued sourcing are important factors influencing commitment of suppliers to programs and improvements.

Commitment, capacity and sustainability

The program was a large undertaking. Nike had its own staff trained, it established a training facility, and its staff had intense engagement over multiple years with its suppliers both at the leadership as well as the operational level. The intervention therefore benefited from significant investment by Nike as well as from its relations and influence in its supply chain.

The lean capability program also required substantive commitment and investment from suppliers. It required participation by senior managers in a 8 week residential training program, it expected them to cover the costs of the training, and demanded a willingness to implement substantial changes in work organisation in their plants.