

*Mahboob ul Haq Lecture: Key Takeaways***Technology, Globalisation and A Need for  
A New Model of Development**

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The transformations in the current global context—including the need to create opportunities for young people - force us to think of a new development model – There is a shift in patterns of structural transformation that has made the traditional model of development less relevant today.

The standard model of structural transformation divides the economy on a sectoral basis - agriculture, manufacturing, and services. It suggests that as development occurs, there is a movement of resources—particularly labour, from low productivity / traditional agriculture to urban occupations that are more formal and organised. In the course, of this transformation, the economy experiences a significant increase in overall productivity—which is essentially the engine of growth in the standard story of structural transformation/model of industrialisation. As the economy grows, there is a further movement towards services—the tertiary sector expands, but this deindustrialisation only occurs after a certain (economic) maturity has been reached and does not bring too many challenges for development *per se*.

However, what is happening in many developing countries today is very different not only from the standard industrial model but also from the experience of the ‘miracle economies’ like Japan, Singapore, South Korea, and, more recently China. What is being witnessed instead is a weak process of industrialisation whereby the movement of labour out of the countryside is towards informal services. The process of urbanisation is not necessarily associated with increases in productivity because these informal services are not just precarious but also have relatively low productivity. To the extent that there is growth in manufacturing, the bulk of it is concentrated in small scale, low technology, informal, and thus low productivity parts of manufacturing.

Therefore, the two key trends that undermine the traditional model of development are (i) premature deindustrialisation, and (ii) dominance of informality within manufacturing. Examples of successful industrialisation are Taiwan & Vietnam, where the rise in total manufacturing employment is followed closely by the rise in informal employment. In contrast, the recent experience of industrialisation in Ethiopia and Tanzania shows a rapid increase in manufacturing employment but few gains in informal employment.

Employment growth within manufacturing is concentrated in the small and informal firms with the worst productivity performance. On the other hand, productivity growth is concentrated in large firms that do not absorb a lot of workers. Such patterns of *manufacturing dualism* being witnessed in developing countries are very worrisome since,

ideally, it should be the high productivity firms that should be expanding and absorbing employment.

Standard explanations of dualism in developing countries (ranging from the market or government failures to high labour costs, restrictions on firms' entry and, exit, and poor business environment) do not fully explain the dichotomy. The puzzle isn't that there is poor productivity performance—**there is a segment of firms that is exhibiting good productivity, but the puzzle is that they are not generating high employment.** One explanation would be that these firms are using capital-intensive modes of production.

However, in a labour-abundant country, it is surprising that the gains in productivity would come entirely through capital deepening—which should be kept in check due to relative factor prices. Recent research by the speaker suggests that what is happening in terms of the technology choices of the larger firms is essentially a consequence of a global technological change. Production within manufacturing has progressively become more capital intensive (less reliant on low-educated and low-skilled labour), and larger firms in developing countries (competing with global firms) are increasingly forced to employ technologies that are skill-intensive—despite the abundance of low-skilled labour in their countries.

**The technological changes in manufacturing have been biased against low-skilled labour.** If we observe the incidence of employment by different skill groups in manufacturing—low, intermediate, and high, we see that the entire decline in employment in the share of value-added in manufacturing is accounted for by the decline in the share of the low-skilled labour. This is a global technological trend that has a significant consequence for comparative advantage to a developing country because the technological changes are biased against the factor of production (low-skilled labour) that the low-income countries are most abundant in.

There is a process of global technological innovation, but it is biased against low-skill labour. It pushes costs of production down only for capital-intensive technology. In world markets, global prices for capital-intensive technology fall. Firms in developing countries cannot compete while using labour-intensive technologies and are forced to adopt capital-intensive technologies and end up producing a lower quantity.

The consequence of such biased technological change for a developing country occurs in the form of a triple-negative shock on employment prospects. First, there is a reduction in output because the change in technology has reduced the country's comparative advantage. Second, because the production technique has become more capital intensive, there is an additional loss in employment. The third is the dynamic effect of a reduction in employment elasticity to positive productivity shocks. This occurs because the production structures now in place have a steeper cost curve due to scarcity of capital and components to capital (e.g. skills). The dynamism of employment when the economy is doing well (when there is positive profitability) is lower. As a result, **the prospects for industrialisation-driven growth have become much weaker** across the world for developing countries.

What then is the alternative to this standard model? We may begin by considering the reasons why industrialisation is a potent engine of growth, to begin with. One is the process of productivity dynamics—that historically there has been an unconditional convergence in the formally organised manufacturing to the productivity frontier. Second,

traditionally manufacturing had the ability to absorb labour and there were few supply-side constraints to manufacturing because of the “reserve army” of relatively low productivity workers. Third, the absence of demand-side constraints—the size of the home market was not a constraint. Alternatives may exist within agriculture and services, but it is difficult to identify the sector that may fulfill the historical role of manufacturing.

Opportunities for productivity increase in agriculture exist, but it will not be a labour absorbing sector. The high productivity and tradable sectors (IT, finance, insurance, business outsourcing) have the right technological characteristics but are also very skill intensive and so may not absorb as much labour. Employment opportunities in services are relatively low productivity and are in the non-tradable sector. These opportunities will eventually run into demand-side constraints and will not be as potent an engine of growth as tradable services and tradable manufacturing can be.

Where will the good (productive) jobs come from? Instead of focusing on the most productive and most competitive firms (traditionally export champions) which are oriented toward the world market, developing countries may need to work with small firms that are producing for the home market. This will require a mix of interventions both on the demand and the supply side of the labour market to build firm capabilities. Industrial policy should focus on promoting higher quality jobs in small and medium-sized firms through employer-linked training policies, wage subsidies, customised business incentives, etc.

In thinking about a development strategy, growth policy and social policy have become one and the same. It is not possible to have growth without creating productive jobs and expanding the middle class. At the same time, structural factors behind poverty and social inequality cannot be addressed without creating good jobs for relatively low-skilled workers.

### *Allama Iqbal Lecture: Key Takeaways*

## **Opportunities in Khyber Pakhtunkhwa**

TAIMUR SALEEM KHAN JHAGRA

Typically, we do not think big enough and do not try to make a change or put to practice a big idea - this seems to be one of the reasons why Pakistan, despite all the potential, has not grown the way other countries have.

Here are the highlights of the initiatives of the KP government during around four years of political tenure. The key to growth, prosperity, and improving the job market is the availability and better use of financial resources. Recognising this, the province focused on increasing its revenues through the KP revenue authority—the province emphasised building its revenue-raising capacity by shifting control of the revenue authority from the excise department to the finance department, and by having new leadership at the helm in the Authority. Thanks to reforms introduced, the revenue generated by the KP revenue authority has increased manifold—from Rs.10 billion to Rs.27 billion in three years, which reflects significant growth. Just the revenue from sales tax on restaurants increased four