

## **Transforming Kerala to a knowledge economy: A manifesto**

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Most of you are familiar with the social sector achievements of Kerala which are very well known in development literature. Despite the relatively backward economic conditions, Kerala has been able to provide much better education, healthcare and social security for its citizens. These are comparable to developed countries rather than most parts of India and this has been achieved through a process of redistribution and public action. And this redistributive strategy of growth has ensured that the honorary citizen in the state is assured of the basic needs. This very proud heritage we want to take forward.

But there are problems. The economic base has remained relatively stagnant, slow growing and less productive. As a result, unemployment of the educated is the biggest developmental challenge faced by Kerala. The present employment schemes are inadequate to resolve unemployment of the educated. While the national level unemployment in the age group of 15 to 59 was 5.8 per cent in 2018-19, it was 10.4 per cent in Kerala. The main reason attributed to this is unemployment among women in Kerala. While the male unemployment rate in Kerala is 5.8 per cent, the female unemployment rate is as high as 19.1 per cent. It is shameful to note that while the labour participation rate of men is 73.5 per cent, that of women is only 28.5 per cent.

Therefore, there is always a concern whether this redistributive path could be sustained. Hence, there is an urgent need for a restructuring of the economic base and shift in the development path from low productivity. We must transform to a development path which is more in tune with the resource endowment of the state, both natural and human. Therefore, we have come to the conclusion that the most suitable industrial structure would be the one dominated by knowledge intensive activities.

It requires huge investment in the infrastructure, because for the last one century Kerala had focused on social sector spending. We are capital expenditure deficit. So, five years back we made a bold initiative to mobilize resources outside the budget through special purpose vehicle- Kerala Infrastructure Investment Fund Board (KIIFB)- that has led to unprecedented growth in the investment for building physical infrastructure. The total amount would come to roughly half a trillion rupees.

We are attempting to do two major interventions; first one is to create the global job portal. Within this small state of Kerala, the total number educated unemployed, including women who are just forced to remain in the houses would come to 5 million. So, they will be skilled through intensive program of skilling and placed on this job portal trying to make an intervention in the new drift or shift in the labor market towards say working near home or working at home. Secondly, we would also want to promote knowledge industries within the state. So, we have a very big program of promoting innovation start-ups and knowledge industries. And the basis of all this would be restructuring of the higher education in Kerala, a very bold program to change the entire higher education sector.

The government aims to utilize all the possibilities created by work near home and work from home. Opportunities will be created for companies to recruit employees for centralized or decentralized jobs. An extensive scheme is being initiated to provide employment to at least 20 lakh persons through digital platforms within 5 years. Changes happened in global job market and the fame attained by Kerala in COVID defense will help in the success of this employment strategy. There was no other time the brand Kerala got discussed even among the common men. Kerala Development Innovation Strategy Council (K-DISC) will be restructured as a registered society with the Chief Minister as its Chairperson. The whole process of transforming Kerala to a knowledge economy will be coordinated and monitored by K-DISC. The knowledge economy in turn will be built on three key pillars- digital infrastructure with K-Fon at its center, a vibrant higher education system and finally the Kerala innovation society.

### **Digital infrastructure**

For transformation into such a society, it is essential to have a suitable information and digital ecosystem. The digitalization of schools is a decisive step towards this goal. The new generation can develop expertise in information technology and access the vast universe of knowledge opened by it. Internet will be provided free of cost to below poverty line (BPL)

families. 30,000 government institutions will be connected by high-speed intranet facility. The internet speed will range from 10MBPS to 1GBPS. The government will facilitate the growth of fields such as Artificial Intelligence, Block chain and Internet of Things. E-commerce and digital services will be made available to industrial, commercial and tourism enterprises including small scale sector of Kerala. K-Fon will become a shot in the arm for our e-governance system.

### **Towards excellence in higher education**

Our next aim is to transform higher education in line with our achievements in school education over the past five years. Several different indicators are now available globally for measuring the standard of higher education. The most prominent among them is the ranking of global universities published by Times higher education. Only one university from Kerala figures in the list and the ranking for this is between 600-800 range. Another prominent ranking is by the Shanghai Ranking Consultancy, which ranks 4000 universities across 54 subjects. Not even one university from Kerala finds a place in these 54 subjects. Investment many times higher than the present one is inevitable in higher education. Similarly, the approach to teaching and research needs a paradigm shift. Both are not easy. We ought to move towards this goal with resolve. The enrolment ratio in higher education sector shall be raised to at least 75 per cent. The all-India average is 26 per cent. At present the enrolment ratio in Kerala is 37 per cent.

To make the higher education more vibrant, a number of fully autonomous Inter University Centres and Schools are being envisaged within universities. The appointments to these institutions will be made from experts at the national level through a search committee. These centres/schools will develop under the leadership of top-experts in the respective fields.

Further 500 'Nava Kerala' post-doctoral fellowships are being instituted with support for establishing laboratory and other facilities. These post doctoral fellowships, with a duration of two years, will be open to experts within and outside the country with a view to facilitate brain circulation.

### **Kerala - an innovation society**

Innovation means the translation of new or existing knowledge into a new product, new process, new form of organisation or a new marketing method. Incessant innovation needs to be made at all levels for the rapid growth of Kerala. Binder-less board made of coconut pith is a product that can deeply influence the development of Kerala. This idea was born in a

laboratory at the Wageningen University. Foam Mattings Limited had converted this idea into a prototype in their pilot plant. It has been proved that a strong plank can be made from the pith of coconut or from dust of dry husk of coconut without using any chemicals. When it is turned into a product on commercial basis, the change in the plywood industry of Kerala will be phenomenal. This will not only lead to industrial growth but also ensure at least one more rupee for the coconut even if it has dry husk.

This budget puts forth a four-point action plan for creating an environment for integrating innovation in all sectors. Any person who find a solution to any of the problems in agriculture, industry, service, business of their locality will have a platform to upload their innovation. K-DISC will classify and evaluate such new ideas and techniques with the help of experts of concerned sectors. In the next stage, Startup Mission and Kerala Digital Transformation Mission in unison will grade these innovations and ensure mentoring and financial assistance for developing them into products. They will take the initiative to spread these products in society as soon as they get 5-star rating. Conditions will be created for Government and Semi-Government institutions to buy such products at a specified rate without tendering. There will also be a scheme for providing diffusion subsidy in proportion to turnover of services and technologies. This is a conscious intervention to ensure that, there will not be any digital divide in integrating new technologies.

Start-ups will be encouraged to transform the products coming from innovation promotion schemes into commercial ventures. Start-ups are relevant not only in the IT sector, but wherever innovative concepts are utilized. Kerala has remained at the top of national rankings for the past two years in the creation of environment for promoting start-ups.