

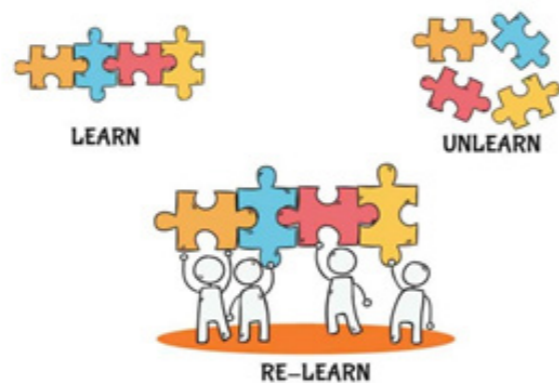
INDIAN FARMERS TO UNLEARN

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To unlearn is to discard something learned, especially a bad habit or false or outdated information/practice from one's memory – this is the meaning that comes up once we put the word (UNLEARN) into a search engine on the internet. There is a tectonic shift in the farming technologies available and the Indian farmer is stuck with the obsolete ideas due to various constraints. I do not want to discuss anything related to the issues the “poor farmer” has. In fact, I would like to coin them as growers or just farmers. Let's us rise up and at least think on a positive note that the farmer is NOT POOR – his ability to embrace change is poor, for this to happen he has to unlearn.

A typical Indian farmer believes that he knows everything specially the economies and policies which is a misnomer. He knows how to grow and crop agronomies are a cake walk for him. But even here he is not gauging himself right as he is not keeping pace with what is available to him. He isn't implementing and inculcating the new available agronomic technologies as far as his inputs/raw materials are concerned. As per Dr. M.J Khan, chairman ICFA, enhanced agricultural incomes would also need better inputs and better technology. Post production, the produce needs to be safely transported and stored. Most importantly, India needs more investments in storage segment – not only in terms of capacity but also in terms of quality. Value addition and



processing can also turn the excesses into valuable products. But the farmer has to be trained for this and for this to happen his depleted mind set has to be changed. By saying this I am not including the urban farmer, the enterprising growers, educated and well-read who is ready to implement new technologies and wants to create a change. Here I mean the illiterate farmer who still sticks to superstition and believes in copying what his neighbor has planted or listening to the agricultural input supplier mafia, whose main aim is to fulfill their companies' sales targets. Farming looks mighty easy when your plow is a pencil and you are a thousand miles from the corn field (president Dwight D. Eisenhower) – this is the situation with our policy makers. Farming is not a job – it's a way of life.

The Fourth Industrial Revolution (4IR) heralds an exponential pace of technological change, building on the digital revolution to combine technologies, spawn new ones, and transform

systems, industries, countries - even society itself. For developing countries, advances in computing power, connectivity, artificial intelligence, IoT, Bigdata, biotechnology and GIS, and newer, more capable technologies hold tremendous promise. Inclusive agriculture, rural growth and structural transformation from agriculture to high-productivity manufacturing and other economic sectors can be accelerated, as technological change transforms individuals' lives and enables developing countries to progress at speeds and on scales previously inconceivable.

Despite technology's promise, there remains a need for substantial increase in old-fashioned investments to catch up with the backlog in physical infrastructure and education to achieve a geographically more dispersed development away from the 100 big cities. Around 25% of Indian adults cannot read or write, and the gender divide must be addressed with investment, particularly in rural women's education and training. Geographical application of new technologies is still limited in rural areas; many farmers remain unaware of these advances. Insufficient connectivity in rural areas along with a lack of basic computer knowledge and literacy hinder development. Substantial investment is needed in physical infrastructure, power, broadband, transportation and education, particularly in rural regions and among the poorest populations in order to truly reap the benefits of the 4IR. (*This paper published in Agricultural Economics, the Journal of the International Association of Agricultural Economists, November 2017 issue*)

This will require new approaches and innovations, as well as increasing collaboration between the private sector and other stakeholders in the food system. It will require integrated value chains that connect farm to fork, competitive markets that provide better prices to farmers, and an enabling environment that supports innovation and action. No one stakeholder – whether governmental, corporate or from civil society – can do this alone, especially given climate change and increasing pressure

on land and water resources. Real impact will come from combining the competencies of diverse organizations and stakeholders and creating better alignment through partnership platforms.



It is important to look at the possible drivers of income growth for farmers. The first source is diversification of farm activities towards high-value crops and enterprises. National-level data reveals that shifting to high-value crops can more than quadruple income from the same piece of land. The second source is irrigation, which can double productivity. The third source is better price realization for farmers through competitive markets, value chains and improved linkage between field and fork. The fourth source is an improvement in the terms of trade for agriculture. The fifth source is technology up gradation. State-level data shows that agricultural income in real terms, including the effect of improvement in terms of trade, doubled between 2006-07 and 2013-14 in Gujarat, Jharkhand, Madhya Pradesh, Rajasthan and Telangana. Few states, namely Bihar, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Rajasthan and Telangana, are experiencing a transition towards doubling farmers' income in seven years while Uttar Pradesh and Maharashtra are showing the potential to do so. In conclusion, if the above-mentioned six measures are implemented sincerely at the state-level, then



farmers' income can be doubled by 2022-23 in most of the states. (Source: Indian express 2016).

Farmers have to come forward to embrace the change and this requires efforts from government and private organisations to help them achieve the set targets. In a country dominated by smallholders, affordable access

to any capital-intensive technology needs financial and institutional innovations that would reduce the capex requirement, ensure highcapacity utilization and create competitive rental markets. Many other major challenges to accelerating technology adoption by farmers—like small fragmented holdings, high transaction cost of reaching smallholders or low levels of functional literacy among farmers—require huge grassroots level efforts, both by government and the civil society, in agriculture and non-agricultural sectors of the economy. The biggest problem Indian farmers' face is a disparity in information on demand, coupled with lack of market linkages. At the end, I would like to share the very common phrase “our culture is Agri culture”.

