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“Loyalty to the nation all the time, loyalty to the Government when it deserves it...”
- Mark Twain
Budget 2017 was unique because it changed the age-old tradition of being presented on the last day of February, and for the first time in independent India, the Railway Budget was combined with the general Budget. However, what was perhaps more unique were the circumstances under which it was being presented. Not only the global headwinds of an unprecedented nature, but also the huge uncertainty regarding where the current year will finally end in terms of GDP growth and related tax collections as well as the mid-year GST roll out and its attendant uncertainties, created complexities in estimating tax revenues for the coming year. In the midst of having to balance fiscal prudence, throw in a good measure of populism to blunt the pain of demonetisation and to spur both private and Government investment to get back to double-digit growth in the medium-term was not going to be easy.

Demonetisation and its after-effects will continue to remain centre stage for at least the first half of 2017, and while there is no doubt that there will be a blip in the GDP graph for 2016–2017, how soon and by how much the economy will bounce back depends on who you ask, but with both the IMF and the World Bank forecasting between 7.7% and 7.8% for 2018–19, the next target will be to hit the magical double digit.

Indian and Global Economy

The world economic growth for 2016, at an estimated 3.1%, is the weakest growth since 2008–09. This is owed largely to the turbulence in the world financial market in the first half of 2016 due to major setbacks such as Brexit, China’s slowdown, low oil prices and overall weakness in the economies of Japan, US and Europe. Meanwhile, these setbacks were offset by stronger than expected economic activity during the second half of 2016 in the advanced economies, especially the US, which saw a deceleration in the unemployment rate, and the UK, which had higher than expected domestic demand following Brexit. Assuming that this trend will continue, the world economy is expected to pick up steam in 2017 and grow by 3.4%, this time on the back of previously lacklustre advanced economies. This is expected to be supplemented by the projected policy stimulus of the new US administration and its global consequences.

India has become the sixth largest manufacturing country in the world, rising up from the previous ninth position, and thus retaining its bright spot in the world economic landscape. The IMF expects the Indian economy to grow by 6.6% in 2016–17, which is not only a significant one percentage point lower than the previous estimate, but also brings India back to the status of the second-fastest growing economy, especially as China is expected to outgrow by 6.7%.

Inflation

Inflation for the first nine months of FY17 has averaged at 4.8% at the retail level. Consumer price inflation (CPI) increased continuously in Q1 FY17 due to rising food prices and unfavorable base effects. It began declining in Q2 August onwards led by fall in food prices and fuel index. Food prices declined on the back of increase in agricultural output due to normal monsoons and possibly on account of demonetization.
It fell to 3.4% in December due to weak demand conditions following the demonetization move which led to cash shortages. With the effects of demonetization still unfolding and three months of FY17 still remaining, yearly inflation is expected to fall further to 4.7% in FY17. That said, there are some elements in the CPI wherein structural constraints have meant relatively higher levels of inflation. The services part of the index has consistently remained in the range of 4.5%-5% over the last year even as the broader index reached all-time lows. This clearly shows the presence of supply side constraints in the economy. Overall, global commodity prices are likely to move up in line with improving growth prospects in the developed markets. A closer look at the energy sector suggests that oil prices could move up and average in the range of USD 60-65 per barrel and could put pressure on domestic fuel prices. Furthermore, the implementation of the GST also needs to be watched as it could lead to some increase as more services come into the ambit of taxation. We are likely to see higher inflation levels going forward.

**Budget proposals**

- CPI has been trending downwards following the demonetization announcement, which has had the largest effect on food prices.
- Market reforms will be undertaken and the States would be urged to de-notify perishables from APMC. This will give opportunity to farmers to sell their produce and get better prices. • Area under crop insurance (Fasal Bima Yojana) to be increased to 40% of cropped area in FY18 from 30% in FY17

**Monetary Policy**

This year saw a change in the inflation targets under two RBI governors with an accommodative monetary stance throughout FY17. In the first bi-monthly policy of FY17, the previous governor cut repo rate by 25 basis points to 6.5%. This was done to strengthen growth given weak private investment in the face of low capacity utilization. However, a change at the helm of the central bank mid year in addition to the formation of a monetary policy committee resulted in a further change in stance. The committee gave its first review in October wherein the repo rate was further reduced by 25 basis points to 6.25% in accordance with an accommodative policy stance to attain CPI of 5% by Q4 of FY17. Under the new regime, inflation targeting seems to have been somewhat relaxed from a strict target of 4% inflation by end of FY18 to 4% with a variance of +/- 2%. This gives the RBI more flexibility in deciding rates and keeps room open to adjust of potential upside risks. Given the mandate of the RBI to target inflation, we are likely to achieve the target of 5% CPI by March end. However, inflation is expected to rise over the coming months and we could also witness the US central bank go in for more rate hikes.

"India happens to be a rich country inhabited by very poor people ...."

- Manmohan Singh

"Liberty doesn't descend upon people, People must rise themselves to it ...."

- Liaquat Ali Khan
As such, we believe that the RBI does not have much room for cutting rates and we do not see the repo rate going below the 6% mark over the next year.

**Fiscal Policy**

India’s fiscal deficit in the first eight months of FY17 was 85.8% of its total Budget estimate in FY17 as against 87% of the Budget target last year. Tax revenue stood at 59% of the full year Budget estimate. The government’s plan expenditure during the period was 66.2% of the full-year Budget estimate. The non-plan expenditure during April-November of FY17 was 64.6% of the whole-year estimate. The numbers show that the government has continued with its stance of front loading expenditure to give a boost to growth. Furthermore, the government is now trying to target an overall sustainable debt level, which is more in line with its peer countries. The Fiscal Responsibility and Budget Management (FRBM) committee has recommended 60% as a combined debt to GDP with the central government accounting for 40% and state governments accounting for 20%. The government has adopted this approach and has assured of planning its expenditures accordingly. The government has committed to achieve the 3.5% target and furthermore has aimed for further consolidation to 3.2% of GDP in the next fiscal. Important to note under the new regime, the government can go in for expansion up till 3.5% of GDP

**Budget proposals:**

- FRBM Committee has recommended 3% fiscal deficit for the next three years, keeping in mind the sustainable debt target and need for public investment, fiscal deficit for 2017-18 is targeted at 3.2% of GDP and Government remains committed to achieve 3% in the following year
- Net market borrowing of Government restricted to INR 3.48 trillion after buyback in 2017-18, much lower than INR 4.25 trillion of the previous year
- The quantum of major subsidies as a proportion to GDP has been gradually moving down over the past years.
- There have been significant savings made through direct cash transfer in the past fiscal, with the government saving INR 360 billion by digitizing economic activities in the fiscal year (as of November)
- Budget proposed enactment of the Aadhar bill for disbursement of financial subsidies and benefits

**Demonetisation**

On 8 November, 2016, the government announced the demonetization of ₹500 and ₹1,000 denomination notes, thereby rendering 86% of the cash in circulation as invalid. The government also placed various restrictions on the convertibility of domestic money and bank deposits.

The decline in cash had the following effects:

1. Increase in bank deposits with a resultant decline in interest rates on deposits, loans and government securities as well as a decline in real-estate prices
2. Increase in financial system savings
3. Increase in digitalization
4. Increase in income disclosure with a resultant increase in collections by tax and other local authorities

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"**The economy is in a difficult situation, but that does not mean we should start eating lizards...**"

- Pranab Mukherjee

"**We inherited a sentiment of, if I may say so, doom and gloom, and the investor community had almost written us off. We have come a long way since then....**"

- Arun Jaitley

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Digital India

Digital India is an initiative launched by Prime Minister Narendra Modi on 01 July 2015 with a view to empower the people of India digitally, and bridge the gap between rural and digital India. It seeks to transform the country into a connected economy, attract investment in electronics manufacturing, and create millions of jobs and support trade. The wider goal of Digital India is to bring broadband connectivity in all panchayats, wifi in all schools and universities, and public wifi hotspots in all major cities in India by 2019. The program will also contribute in the delivery of digital services in the health, education, agriculture, and banking industries. An array of milestones have been achieved since the launch of the Digital India program, and significant progress has been made in taking forward the vision of a digitally empowered India. A number of digital schemes, products, and services have been introduced to promote e-governance. The program received an additional push from the demonetization announcement on 08 November 2016, which banned high-value notes and provided an impetus to digital payments and e-governance. In an effort to provide basic digital infrastructure, 1,12,871 kms of optical fibre cable have been laid to provide high speed connectivity across the country. Further, citizen engagement platforms such as MyGov have been developed wherein 1.93 million registered users provide inputs for improving governance and participating in other activities. In addition, 166,000 Common Services Centres providing Government and private e-Services to citizens have been set up in order to enable penetration of digital services in the localities. These centres provide skill development, digital literacy and financial services to rural India, among other things. Furthermore, over 9.8 million citizens have been enrolled under Digital SakshartaAbhiyan (DISHA); an initiative to make at least one person in every Indian household digitally literate.

Skill India

Launched along with the Make in India flagship scheme on 15 July 2015, Skill India seeks to transform India into a prospering industrial economy, with an able and skilled workforce is of paramount importance. With a primary focus on the 2.4 million youth who lack formal certification and the means to get it, Skill India aims to train over 400 million people in India in various skills by 2022, which will boost the employability of the population. Since the program’s initiation, the government has initiated several programs under Skill India such as setting up a student Financial Aid Authority to monitor scholarships and Educational Loan Schemes, and setting up various institutes including a new IIT, AIIMS, and Horticulture, Pharmaceuticals, and Science and Education Research institutes across different states in India to name a few. It was announced that more than 10.4 million youth have been trained under the Skill India Mission in the year 2015-16 which reflects growth of 36.8% versus the previous year’s data. Further, the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), which was also launched on 15 July 2015, alone has witnessed more than 2 million people undergo training in their choice of skills, out of which 40% are women candidates. Below is a table summarizing the key policy initiatives and recent developments with regards to Skill India.

“Income tax is the most difficult thing up-on Earth to understand ....“
- Jaswant Singh

“I reject the argument of policy paralysis. Just as there are business cycles, there is a cycle around the trend growth rate of an economy .... “
- P Chidambaram
institutes including a new IIT, AIIMS, and Horticulture, Pharmaceuticals, and Science and Education Research institutes across different states in India to name a few. It was announced that more than 10.4 million youth have been trained under the Skill India Mission in the year 2015-16 which reflects growth of 36.8% versus the previous year’s data. Further, the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), which was also launched on 15 July 2015, alone has witnessed more than 2 million people undergo training in their choice of skills, out of which 40% are women candidates. Below is a table summarizing the key policy initiatives and recent developments with regards to Skill India.

Summary of the Budget

GDP growth is expected to exceed the 7% mark in FY2018 after suffering from the transient negative impact of demonetization in FY2017. On the contrary, demonetization is expected to leave a positive impact on the economy through greater tax compliance, increased digitalization and investments in capital formation. Besides, in order to mitigate the adverse impact of demonetization, several pro-poor and pro-rural initiatives have been taken in the budget to spur demand, contributing towards economic growth.

Demonetization also led to an increase in bank deposits. Flushed with cash, the banks are expected to cut lending rates. Real-estate prices are also expected to remain low.

The Goods and Services Tax (GST) Bill is expected to be implemented by 1 July, 2017, and it is likely to lead to spurring growth, competitiveness, indirect tax simplification and greater transparency. Apart from widening of the tax net, GST will also contribute significantly to the GDP. However, although making projections and targets for GST revenue in its first year of implementation would be difficult, we believe that GST will help boost GDP figures, and the estimated impact on the GDP may vary between 1% to 2%.

While a fiscal deficit of 3.5% of the GDP was achieved in 2016-17, the expected fiscal deficit for 2017-18 is 3.2% of the GDP, which looks achievable given the expected thrust in tax collection after the implementation of GST and also greater tax compliance after demonetization.

The current account deficit has declined to reach about 0.3% of the GDP in the first half of the year 2017, and it is expected to be at around sub-one percent level in FY2018.

The festering twin balance sheet has been a pressing concern effecting private investment. While the Indradhanush Scheme aims to infuse ₹70 thousand crores of capital into public sector banks, how far will this address the issue remains to be seen. The survey proposes to set up a Public Sector Asset Rehabilitation Agency (PARA) as a resolution strategy.

The retail inflation declined substantially to 3.4% at the end of December, and it is expected to be below the Reserve Bank of India’s target of 5%.

“Charity, it is said, must begin at home. I believe austerity, too, must begin at home ...”

- Yaswant Sinha

“If exchange rate is a matter of pride, Japan should be only half as proud as India and China ten times more ...”

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Conclusion

Given the recent turbulence in the domestic economic environment and fast changing global economy, the macro-economic fundamentals of the economy remain robust and augur well for the future. Latest data points suggest that demand is recovering in the economy and the Reserve Bank of India has also started to increase withdrawal limits. Growth is expected to move up over the course of the next year and is likely to cross the 7% mark again. The government on its part has shown confidence in its existing approach and schemes and increased allocations in a number of programs. The next step would clearly be the effective implementation of these schemes, which can potentially help the economy from a structural perspective. Schemes to alleviate skill shortages are likely to also lead to a healthier job market that is in tune with the changing times while increased rural spend is likely to bring about changes at the supply side of the economy. While there remain challenges on domestic front such as inflation and on the international front due to geo-political concerns, the stage seems to be set for a more sustainable growth process to take hold.

“Our foreign exchange reserves when I took over were no more than a billion dollars; that is, roughly equal to two week imports...”

- Manmohan Singh

“Educating and skil-ling our youth to ena-
ble them to get em-
ployment is the altar
before which we must
all bow.....”

- Arun Jaitley
August 4, 2016. GST Constitution Amendment Bill was finally cleared in Rajya Sabha after persistent conversations and long-term debates. Now, when the bill has finally been approved, taking into consideration all the note-worthy points, the biggest challenge for the government still stands on when and how to introduce it. Demonetisation turned out to be one of the divine weapons for the NDA government to catch hold of businesses and high ranking individuals who were dealing with black money (without paying taxes). However, its ramifications are still flowing through different corporate sectors and MSMEs. On a similar tone, the NDA was trying to release GST as well but looks like it has pushed it further down in 2017 so that markets could revive itself from the effects of demonetisation.

Let us try to see how a Non-GST and a GST scenario works with help of a small operational activity example. Suppose raw material for a product has been purchased and the value has been added to that item after its conversion to a product. The cost of final product is Rs.100 (including the 10% tax). Now, the selling price of product is set at Rs.130 (adding Rs.30 as profit margin). There would be a 10% tax again on the product before it goes out for selling to wholesaler. The final selling price for retailer is adjudged as Rs.143 (including Rs.13 as the 10% tax amount). Now, the wholesaler would add his profit margin before selling it to retailer. Then, the selling price for wholesaler would be Rs.163 (adding Rs.20 to wholesaler’s profit margin). There would be 10% tax again on this which would take up the final purchasing price for retailer to Rs.179.30. Total tax under this entire scenario would be 10 + 13 + 16.3 = Rs.39.30.

On the other side, in GST regime, the extra added tax gets eliminated. Raw material is purchased and converted into a valuable product with cost price of Rs.100 (including 10% tax). Profit margin of Rs.30 is added and selling price of product comes to Rs.130. Now, when the 10% is evaluated for this amount, it turns out to be Rs.13, but out of that value, Rs.10 has already been taken care of in the production tax part. So, the net tax figure to be added is (Rs.13-Rs.10) = Rs.3. The final purchase price for wholesaler would be Rs.133 instead of Rs.143. After wholesaler has added his profit margin of Rs.20, the purchase price for retailer is Rs.153. The tax of 10% is calculated which turns out to be Rs.15.30. But, a sum of Rs.13 has already been paid as part of taxes in production and wholesale value added services. So, net tax to be added would be only (Rs.15.30 – Rs.13) = Rs.2.30. So, the final purchasing price would turn out to be Rs.155.30. Total tax amount for this scenario would be 10 + 3 + 2.30 = Rs.15.30.

This highlights the considerable amount of tax shift with the inclusion of the new GST bill. Let us look into how it would impact different sectors across our economy. GST would eliminate multiple levies and it would allow deeper study of technological aspects in the IT industry. FMCG companies pay almost 25% including excise duty and VAT. With the entry of GST, it would be reduced to around 17% which would assist these companies in managing logistics and distribution costs. Prices of the mobile handsets are likely to come down. It will also remove the waterfall effect of taxes on the customers. A reduction in the automobile prices along with tax reductions to media, airlines and cement industries as well, will be seen.

“*There can be no rise in the value of labour without a fall of profits ...*”

- David Ricardo
However, we can’t ignore the negative impacts of GST. In the technical division, the duty on manufactured goods could see a rise, which might lead to increase in prices of electronic items. Tax collection guidelines in GST would increase administration and documentation workload and push up costs. Demand for the vehicles could also see a slight downfall. Flying could become expensive as service tax which was less, would be replaced by GST.

On one side where GST pushes the economy to grow efficiently, on the other side, its adverse effects might pull a lot of sectors down as well. Government needs to devise a solid strategy before the actual launch of GST, so as to keep the GDP of the entire nation intact with other economic indicators.

“We don’t hit at all if its honourably possible to avoid hitting, but never hit soft ….”

- Theodore Roosevelt

“We owe something to extravagance, for thrift and adventure seldom go hand in hand ….”

- Jennie J Churchill
YouTube, one of the biggest brands at present is growing even stronger in the recent times. The company has grown from a net worth of almost $40 billion in Sept 2014 to $70 billion in May 2015 and would creep up to $90 billion dollar soon. The company was bought by Google in the year 2006 for an amount of $1.65 billion. It is the 3rd most visited site in the internet and the 2nd biggest search engine in the internet. It has over millions of videos uploaded daily and it’s growing exponentially since its inception. The main rival for YouTube is Snapchat, and to an extent Dailymotion and the like. But slowly and steadily the social media giant Facebook is trying to enter into this on-demand videos business and reduce the market share of YouTube. Even though Facebook is no way closer to YouTube in terms of videos viewed per day but still it is peaking up. If we look into the history of Facebook we have seen that they reinvented the social media platform and from there, they moved to chat messenger, then from there they are moving towards video business as well. The company slowly and steadily has increased its video feed in the timeline quite a lot and the users find interesting to see those funny videos and thereby, eventually pulling back users/viewers of YouTube by providing all kinds of on demand services on one go and they want to substitute TV with Facebook. If you see over the last decade, the number of videos uploaded on Facebook has increased considerably and it’s because of many features be it like Facebook live or other features.

YouTube provides its users and YouTubers the option of generating income by uploading videos by monetizing their video and getting money from AdSense. But in the case of Facebook it’s not that way round. So, it will be interesting to see what kind of strategy Facebook implements to compete with YouTube in real sense. With the kind of reach Facebook has, it’s almost possible for it to do so, but its biggest competitor Google won’t give up easily. The rise of online video content over recent years is showing no signs of slowing. According to Cisco Forecast, video will represent 69% of all consumer-based Internet traffic by 2017; this is expected to rise to 80% by 2019. Looking at these stats, it’s clear that video will continue to be a critical element of successful digital marketing strategies for the foreseeable future. In April 2015, Facebook got 4 billion daily views. In the space of just 6 months this figure doubled, reaching 8 billion daily views. In January 2016, Facebook announced that people watch around 100 million hours of videos a day. In February 2016, Google CEO, Sundar Pichai, reminded investors that YouTube’s audience watches hundreds of millions of hours of videos every day. So, there is a fight between the companies on regarding the hours of videos being watched on both the platforms.

Now looking into a marketer’s perspective, if we compare how both YouTube and Facebook charge for Advertisement, we will find the terms and conditions to be very different from each other. As YouTube charge advertisement for every view (30sec video counted as 1 view) of the video whereas Facebook charge per view (3sec of video counted as 1 view) of the video seen. But the cost per impression is very less in Facebook as it has much more user base. So the CPM (cost per thousand) for Facebook is very cheap, and hence the usual advertisers are moving towards Facebook for online advertisement. This parameter is giving tough competition to YouTube as the main revenue model for YouTube is to get money from the advertisers. But still the one factor which is keeping everything in YouTube’s favour is the quality time watched.

“You will need to find passion. Don’t give up on finding it because then, all you’re doing is waiting for the reaper. …”

- Randy Paush
Today, agriculture and allied industries account for about 16% of India’s GDP. Though the contribution of agriculture is far below that of the services and industrial sectors, it is still, unquestionably, the largest livelihood provider in India. Sustainable agriculture, in terms of food security, rural employment, and environmentally sustainable technologies such as soil conservation, sustainable natural resource management and biodiversity protection, are essential for holistic rural development. Indian agriculture and allied activities have witnessed a green revolution, a white revolution, a yellow revolution and a blue revolution. These revolutions, though, have increased the productivity manifold, they have, in many cases, proved to be a pact with the demon. The monster of unprecedented use of chemical fertilizers and pesticides to boost the harvest in Green Revolution has come back to haunt the farmers. The resultant low produce due to the damage to the soil is resulting in tremendous economic burden on farmers, sometimes pushing them to the point where they are forced to take their own lives. In this situation, where the ever-rising instances of suicides amongst farmers is painting a dark and ghastly picture of the Indian agriculture sector, one man has been silently, but surely, waging a battle against chemical and capital intensive traditional farming methods. Armed with his “Zero Budget Natural Farming” method, Subhash Palekar, a 68 year old agricultural scientist, farmer and author from Maharashtra, is revolutionizing the farming process in India by taking it back to its roots.

What is Zero-Budget Natural Farming?

Zero Budget Natural Farming, as the name implies, is a method of farming where the cost of growing and harvesting plants is zero. This means that farmers need not purchase fertilizers and pesticides in order to ensure the healthy growth of crops. It is believed that plants only receive 1.5% to 2% of their nutrient requirements from soil; the remaining is absorbed from water and air. Given that 98% of the nutrients do not come from soil, using fertilizers is not prudent. According to Mr. Palekar, we often come across huge trees in forests, their branches heavy with the weight of countless fruits despite the lack of fertilizers and pesticides. These trees are proof that plants can and do grow healthily without any chemical help. The reason we do not witness the same in our farms is because the microorganisms that convert raw nutrients into easy-to-digest form have been destroyed by the use of poisonous chemical fertilizers, insecticides and pesticides. Cultivation of soil by tractor has already proved to be detrimental to these micro-organisms. Since these micro-organisms help convert nutrients into a digestible form that plants can absorb and use, it is critical to revive them in the farms. Mr. Palekar proposes to revive these micro-organisms by the use of a mixture of ingredients like cow-dung, jaggery, pulse flour and other natural components called ‘Jeevamrutha’. He also proposes various other natural and herbal mixtures termed as ‘Beejamrutha’ for treatment of seeds before sowing. Along with these, he has formulated two different types of fungicides and no less than three different types of insecticides, all made from easy-to-acquire naturally occurring products and by-products of agriculture and related activities. The use of these mixtures is complemented by practices like crop rotation to ensure the replenishment of essential soil nutrients. Mr. Palekar points out that his method of zero budget natural farming is different from traditional organic farming which has received a boost from the Indian government in recent years.

“Never give an order that can’t be obeyed .. …”

- General Douglas McArthur
Xtravagate - The Business Probe

According to him, the so called “organic-farming” is actually more expensive than chemical based farming. The use of these mixtures is complemented by practices like crop rotation to ensure the replenishment of essential soil nutrients. Mr. Palekar points out that his method of zero budget natural farming is different from traditional organic farming which has received a boost from the Indian government in recent years. According to him, the so called “organic-farming” is actually more expensive than chemical based farming.

The Visible Effects of the Effort

Visits to fields where Palekar’s Zero Budget Natural Farming has been adopted and interaction with farmers revealed that all of them were raising crops using modern technology of improved seeds, fertilizers and plant protection chemicals before adopting this new method. It was found that the old method was highly cost intensive where the cost of cultivation of one acre of paddy was Rs.5000/- to Rs. 6000/- and that of sugarcane Rs. 15000/- to Rs. 20000/-. Similarly the cost of cultivation of one acre of banana was Rs. 25,000/- to 30,000/-. This often compelled the farmers to raise loan from conventional and institutional sources. However, the returns were not commensurable with the investments made for raising crops. The produce from field crops generally met the requirements of the family and the marketable surplus was not sufficient to repay the loan. While chemical farming methods yield about 12 quintals of basmati rice per acre; under zero budget farming method, yield was observed to be as high as 18 to 24 quintals, according to Mr. Palekar. Similarly, about 6 quintals of wheat per acre was the normal yield, while it was 18 quintals under zero budget farming. The farmers of Karnataka have been identified as the ones adopting the zero-budget natural farming more than their counterparts in the states of Maharashtra, Uttar Pradesh and Bihar. In Mysore region alone, about 400 to 500 farmers have switched to zero budget farming.

It was due to this ground-breaking innovation in the field of agriculture that he was awarded the Padma Shri, the fourth highest civilian award of India, which also earned him the title of “Krishi ka Rishi” or “The wise man of agriculture”. India needs more of such innovations in agriculture to ensure a healthy development of the sector which provides the lion’s share of employment to the Indian masses.

“Great things in business are never done by one person. They’re done by a team of people. ...”

- Steve Jobs

“Management is about arranging and telling. Leadership is about nurturing and enhancing. ...”

- Tom Peters
Biotech has not been the field of interest for venture capitalists over a long period of time. Unlike other fields, revenues at the early is a rare scenario in the biotech start-ups. "The biggest challenge for biotech start-ups is lack of availability of timely capital. It is true that investors are looking for returns in six-seven years and hence, haven't shown interest in biotech companies as they have high gestation period of around seven to 10 years, which can be fairly capital intensive," says Sanjay Jesrani, Founder and CEO, Go North Ventures and Member, Indian Angel Network. Instead there is a fair number of increase in the biotech start-ups, in the last five years especially and the reason can largely be attributed to the grant sanctioned by the government body Biotechnology Industry Research Assistance Council (BIRAC) and support by the tech giants like IBM.

BIRAC conceptualised Biotechnology Ignition Grant (BIG), a sum of Rs. 50 lakh funding for the projects and the start-ups with big ideas and concepts. Renu Swarup, Managing Director, BIRAC says that since the inception of BIG in July 2012, more than 60 new start-ups have been established, more than 60 new (intellectual properties) have been generated, more than 600 high-technology employment have been fostered, and close to 20 products are in validation stages, and five-seven products are in the market. "BIRAC's BIG initiative has served a catalysing role in helping many a start-up in life sciences," says Kiran Mazumdar-Shaw, chairperson of Biocon Ltd, India's pioneering biotech company. Though the sum of Rs.50 lakhs looks small for a start-up in this field, it is the guidance from the BIRAC that matters more. "The projects are monitored by a technical high-power committee that has the best scientists in India," said Arun Chandru, chief executive of Pandorum Technologies, human tissue engineering start-up that was among the first recipients of the Biotechnology Ignition Grant. Apart from the BIRAC, many VC's are also now showing interest in supporting the biotech and medical start-ups says industry insiders owing to the potential and promise the field shows in the recent years. To support the new ventures on technological platform, IBM recently joins hands with Indian Angel Network (IAN). This strategic partnership aims to build thought leadership by leveraging design thinking workshops while gaining a chance to explore new dimensions of next-gen technologies like Cloud, Cognitive, Analytics, IoT and Mobility. The recent study by ABLE (Association of Biotechnology Led Enterprise) states that biotech start-up ecosystem is booming with 1022 companies and over $2.18 billion in the last five years from 2012-2016. Among 1022 companies, Bangalore hosts 190 companies emerging as the biotech start-up capital of India followed by the National Capital Region and Mumbai and Hyderabad comes third and fourth respectively.

"This is good news and we are aiming to double this number with the ABLE startups 2020 initiative to take the count to 2020 companies by the year 2020 and $5 billion of investments," ABLE president PM Murali said. Bio-pharma sector accounts for the 57% of the share of the companies followed by bioresearch (16%) and bio-agri (10%). The study also reveals that among the new 3000 entrepreneurs between 2012-16, one third of them are women. The recent advancements in the biotech sector is a boost for all the emerging entrepreneurs with the relatively better support from the government to create a revolution in the growth of biotechnology in India.

"The chief obstacle to the human race is the human race....."  
- Don Marquis
Have you ever faced any unintended consequences of your action, or have you ever attempted solutions that backfired and made the problem even worse? If so, then you must be the victim of ‘the cobra effect’.

The terminology came into existence during the British Raj in India. The problem was the increasing number of cobra snakes in Delhi. In order to deal with this problem, government came with a scheme of giving a bounty for every dead cobra. Though the strategy worked well initially, eventually things didn’t turn out as expected, besides it backfired like adding water on an electric fire, as the enterprising locals started breeding cobras to make more money. The British realised their fault and scrapped the scheme. This caused the cobra breeders to set the now worthless snakes free. As a result, the wild cobra population further increased. [2]

This came to be known as the Cobra Effect (a type of Perverse Incentive), which is a phenomenon that occurs when an attempted solution to a problem actually makes the problem worse. [1]

So now the point is, Can we tackle this unintended consequence or can we avoid them? Yes. One solution is to apply Game Theory. One can also apply techniques based on the psychology of motivation, human behaviour and ethics. Getting into the shoes of affecting parties and taking all precautionary steps would help to deal with contingencies.

Ref:

“In the business world, the rearview mirror is always clearer than the windshield..”

- Warren Buffett
It is the emotion of Human beings that decides history. “It could be the best of times, It could be the worst of times. It could be the age of Wisdom, It could be the age of foolishness. It could be the epoch of Belief, It could be the epoch of incredulity. It could be the spring of Hope, It could be the winter of despair”. The above quote of Dickens might be the emotion of every Individual all over the world in the early 1990. People weren’t sure whether it was the time of forgiveness or the time for revenge for the century of injustice.

Saul Dubow, a historian quotes, “I believe the prison guards opened not just the gates of Vester prison, but also the pathway of the new era”. The whole world was eyeing that man. “He could be the Next Hitler or a first Mandela”. It was a time of Confusion. Just a few months before, after the demolition of the Berlin wall in 1989, the world witnessed a major step in achieving Humanity. Was that a time for another change? Of course, Yes! But was that a positive one? “Still not answered”. Amidst the confusion that prevailed, Nelson Mandela was released from Vester Prison in February of 1990, after being in prison for 27 years. It was the time for Mandela to choose his path, whether to move on towards the future or to remain clinging on to the past. British P.M Margaret Thatcher has described the African National Congress (ANC) as a typical terrorist organization after Roodepoort Standard Bank attack on June 3, 1988 conducted by the ANC. Mandela clearly understood, he has to voice up his stand to the world, or else the hard work he had done earlier to abolish apartheid will end in vain.

It was 1995. What was the Specialty about 1995? South Africa was hosting its first Rugby World Cup. Was that all? No. It was a time of action for Springboks (South Africa’s national Rugby team). Despite the presence of millions of spectators, one cannot simply ignore the 77 year Old Mandela wearing a Green and Gold shirt of Springboks jersey. It was a known fact, that at that time, all the players of Springboks were South African Whites. Nelson Mandela shocked the world when he urged all of his supporters to cheer for the Springboks. Without uttering even a single word, Mandela clearly stated that all he wanted was peace and not a revenge against former Whites, who treated them as slaves for a century. Mandela strategically used the emotions of people to gain their belief. Mandela approved the song ‘Nkosi Sikele Africa (God Bless Africa) as National anthem to show his stand to the world. The crowd stood silent when the speakers started singing “Nkosi Sikele Africa” (God Bless Africa - Xhosa language). The next two lines of the Song were sung in Zula followed by, Sesotho, Afrikaans (South African traditional languages). The whole world then went silent for a moment on that 13th line…. “Sound of call to come together, And united we shall stand, Let us live and strive for freedom, In South Africa our land’.

It was a time of relief. It was the time for tears of Joy among the spectators and to the world. Mandela, by including English lyrics in the national Anthem, clearly stated he welcomed them with warm hands. He made it clear that his aim is to build an environment where people of all race lives in harmony and peace.

Mandela, A man who knows what to do, when to do……And he had done it.
TEAM XTRAVAGATE

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