

## **28<sup>th</sup> Convocation, Dr Panjabrao Krishi Vidyapeeth, Akola**

### **Convocation Address of Dr. Yashwant Thorat**

Hon'ble Pro-chancellor of the University Sh. Radhakrishana Vikhe Patil, State Minister for Agriculture and Marketing, Govt. of Maharashtra. Hon'ble Vice-Chancellor of this esteemed University Prof. Raviprakash Dani, Guest of Honour of today's Convocation Prof. Monkombu Sambhasivan Swaminathan, former Vice-Chancellors, Members of the Executive Council, Academic Council, Board of Studies, Faculty, distinguished dignitaries, invitees, Candidates receiving Degrees and Honours, farmers, Journalists, Media Core, Ladies, Gentlemen and students. It is both a pleasure and a privilege to have been invited to deliver the address at the 28<sup>th</sup> convocation ceremony of this distinguished university.

2. My working life has largely been in the field of development - both development economics and development banking. My acquaintance with agriculture began when as a young probationer in the Reserve Bank of India I was posted to the Agriculture Credit Department in 1972. Coming as I did from a family of farmers, I took to the subject naturally and have remained faithful to agriculture and rural development in its various facets for over four decades.

3. In my address today, I intend first to say a few words about Dr Panjabrao Deshmukh, whose name this university bears with pride and thereafter about the university itself - its journey and achievements. The thrust of my address, however, will be on the concerns and challenges of agriculture and I will end by exploring some of the issues of conduct, conscience and citizenship which have troubled me deeply and which we need to think about individually and collectively for societal and personal development.

#### **4. Dr Panjabrao Deshmukh**

First, my salutations to Dr Panjabrao Deshmukh – a distinguished son of India, Maharashtra and Vidarbha. You all know that Dr Deshmukh was a member of the Constituent Assembly which, in 1950, gave free India its constitution. I was aware of this but on being invited to deliver the convocation address, wanted to better understand the nature and extent of his contribution. Not having access to his personal writings, I decided to peruse the published records of the proceedings of the Constituent Assembly, of which he was a member, to get an understanding of the concerns which our founding fathers had at the time of the birth of free India. While doing so what impressed me most was the passionate plea made by him during one of the debates that if India had to find its rightful place in the community of nations, it had no option but to quickly create a policy and operational framework to leverage our then existing traditional agriculture with modern technology to build a new paradigm of development.

I also learnt that Dr Deshmukh established the Bhartiya Krishi Samaj – an association of farmers. He did this because he saw well before others that for real and sustainable growth of agriculture, it was vital for farmers to get a fair share of compensation for their toil and efforts. He saw that for this to happen, farmers had to be organized in a forum from where they could articulate their voice collectively, freely and fearlessly to those entrusted with policy formulation. Unfortunately, even 50 years after he made his first efforts, agriculture continues to remain the largest unorganized sector of our economy. No doubt there are some associations and organizations of farmers here and there, but nothing which can be termed as a pan India organization of cultivators.

But that is not important. What is important is the vision which Dr Deshmukh saw and if you too want to see it, as I am sure you do, please close your eyes for a minute and bring to your mind, the picture of a typical farmer of this rain fed region. Then hold that picture and multiply it by a factor of 60 million representing – roughly – the number of our brethren engaged in the rural sector. Now, with this picture in your mind, imagine what would happen if these 60 million farmers were to say with one voice, that if they were not given a fair price for their efforts, they would - just for one crop cycle – produce food grains only for their personal consumption but not for the general market. My friends, if such a thing was ever said - and I hope it never is, then the foundations of our polity would be shaken and the rules of the game by which we are governed would have to be altered. This then was the grand vision Dr Deshmukh saw for an agricultural nation at its birth. The other initiatives which he took such as bringing the Japanese method of rice cultivation to the country and organizing the first Agriculture Fair in India in 1958, were part of that vision. Therefore, as you pass out I would like you to remember Dr Deshmukh not only as a great visionary and a tireless worker for the cause of farmers but as a person who is reaching out to you today from the past and asking you to work towards actualizing his vision in your life time.

#### **5. PDKV.**

Now about the university. I hope all of you students know – and realize – that you are very privileged. Your university is a front rank university in its field and you are fortunate to have studied in it. On what basis do I say this? To my mind, there are 3 crucial tests for judging whether or not an institution is at the cutting edge of its chosen field of education – in this case, of agriculture.

- The first test relates to the quantum, range and quality of research done within a university. Judged by this criterion I find that to date, under the varietal and technological development program of the PDKV, as many as 144 superior crop varieties including 15 hybrids have been released and 1157 improved crop production technologies popularized at the ground level.
- The second test to judge a university is to scan the academic standing of its collaborators. Here again, it is a matter of gratification that the university has recently – and more importantly, successfully – implemented a Memorandum of Understanding, among others, with the Cornell university in the United States, TIFR, ICAR and IIT, Mumbai.
- The last test – which really is the litmus test, is how a university shapes its students. In other words, what is the quality of those who pass out of its portals — measured not only by their academic worth but also by their overall development and growth. And here too, I am happy to note that one of the students who studied in PDKV — Deepika Mishra — walked out of this university into the campus of the University of Texas on full scholarship. But if I am to be honest, I would have been much happier if instead of one Deepika, there had been many more. I want you students to know that I come from very much the same rural background as you do and am, therefore, in a position to appreciate the difficulties which you have faced and surmounted to come so far. For this I commend you. But my vision is that you should so excel in education and in overall development of yourself that one day Maharashtra should once again be in the forefront of India and India in the forefront of the world. And if that is to happen, then the road, so to say, to Texas must be

made much broader so that many more of you can walk it as an outcome of good teaching, personal sacrifice, relentless effort and the will to succeed.

May you have the strength to achieve this. Therefore, In addition, therefore, to remembering Dr Panjabrao Deshmukh today, I want you to also remember and give thanks to your university and your teachers.

## **6. Agriculture – Concerns and challenges.**

Having spoken about Dr Panjabrao Deshmukh and your Alma Mater, let me now turn to the well ploughed field of agriculture. All of you have, as part of your academic training, studied agriculture as a discipline within the broad stream of “science”. So today, I am not going to talk to you about things you already know - such as how to design a technological breakthrough or how to converge it with a robust agriculture development program. Nor am I going to speak on how to develop high yielding or weather resistant seeds or how to improve the efficiency of input use for generating a sustainable increase in production.

These are things you know well – perhaps better than me. Let me instead take you away from the lecture halls, laboratories and demonstration farms of PDKV, to another - but connected - area of agriculture i.e., how agriculture and rural development are seen by an economist. You are lucky because I have a flight to catch in the evening and will, therefore, focus only on some of the more important concerns and challenges in agriculture as seen from a macro perspective i.e., a national point of view.

### **A. Agricultural growth.**

These concerns and challenges relate to certain broad groups of issues. The first set of issues relates to agricultural growth. Is growth in agriculture adequate as compared to other sectors of the economy? Is it sufficient to meet domestic consumption and our food security needs? Do all share in it? Is it balanced across cereals, pulses, fruits and vegetables? Is it even across regions? If all regions are not equally well endowed in terms of natural resources such as soil, water, precipitation, how do we deal with dry lands or regions of low rainfall and high evaporation?

Agricultural growth continues to impact the overall performance of the Indian economy in a significant way. Thus a 1% incremental growth in agriculture has the effect of generating additional income of Rs.10000 crores (0.25% of GDP) in the hands of the farmers. Therefore, if we want to reach our GDP growth targets, we must achieve and sustain a high average growth in agriculture.

This is known and well accepted. But the fact is that growth in the agriculture sector, when viewed from the long term perspective, has been both *low and volatile*. From the 9<sup>th</sup> Five-Year Plan onwards, agricultural growth has been around 2.5% and though it improved to around 3.5% during the 11<sup>th</sup> FYP, the differential in the growth performance of agriculture and the other sectors of the economy continues to be a cause of concern.

Low growth of the sector has led to a steady decline in the share of agriculture in the GDP from around 30 per cent in 1990-91 to about 14 per cent in 2010-11. However, interestingly, though the contribution of agriculture to the GDP i.e., to the economy as a whole has fallen over time, the number of people engaged in or dependent upon agriculture continue to be constant at around 60% of our population. The implication of a relatively low growth rate in agriculture, low output and a constant population dependent upon the sector is that the income gap between the worker

in the manufacturing or service sector and the farmer, particularly the small and marginal farmer continues to increase.

Agricultural growth has not only been low but also volatile – almost six times that of overall growth. The unpredictability of agriculture is due to factors such as over-dependence on the monsoons, fragmented land holdings, low investment and consequently declining productivity, absence of coordination between production, procurement and prices of commodities, high wastages, lower processing and, as a result, inadequate flow of credit. By definition, agriculture is synonymous with risk and uncertainty. Crop failure on account of adverse weather condition is commonplace to Indian agriculture. It affects the farmer's income and consequently, his ability to meet day-to-day family expenses to pay his debts in time. Repeated crop failures lead to his perpetual indebtedness. One way to mitigate the risk faced by farmers is to provide them with an effective weather insurance scheme. Such a scheme would benefit farmers across states and also serve as an effective check on the trend of increasing indebtedness of farmers in the event of a crop failure.

### **Composition of agriculture GDP.**

In the past, agriculture GDP was food grains dominated. However, this has significantly changed over time. Today, within the agriculture GDP, food grains constitute only around 20% of the total value of output which is less than the contribution from the livestock sector (25%) and almost equal to that of the horticulture sector (20%). This gives an important indication of the shape of things to come and the relative policy emphasis to be placed on the sectors.

### **Gross capital formation in agriculture.**

Fourthly, although gross capital formation in agriculture has increased from 8.6 per cent in 1996-97 to 20.1 per cent in 2010-11, it is still far lower than the gross capital formation in overall GDP. This means that the other sectors – manufacturing and services - are able to attract higher investment as compared to agriculture & allied sector over the Plan periods resulting in growth disparities. Though this is in line with the falling share of agriculture in the overall GDP, and in conformity with the development process observed elsewhere in the developing world, yet keeping in view the high population dependent on agriculture for sustenance, there is need to substantially increase investment in agriculture.

### **Investment in agriculture.**

Investment is of two kinds - public and private. While public – i.e., government - investment in agriculture is critical and has a vital, enabling impact on private sector investment, it forms no more than about 20 percent of the total investment in agriculture. This means that it is the private sector investment which is mainly holding agriculture growth together. Therefore, it is critical that we find effective ways to sustain private sector investment in the sector. The general experience is that sustained investment by the private sector is best ensured by giving it an enabling incentive structure.

### **Agriculture output and food security concerns**

An important issue often debated is whether agricultural output is – and will be - in a position to address our consumption and food security requirements? An in-depth analysis of demand and supply in Indian agriculture over the long term indicates that from 2021 onwards, the increased demand for food due to population growth and rising per capita income is likely to exceed the supply of cereals, pulses, edible oil and sugar. This demand can only be met by bringing about

productivity increase in food crops because though the yield of major crops has grown over time, it is still low as compared to other major agriculture commodity producing countries in the world.

## **B. Structural issues.**

### **Small and marginal farmers.**

On the structural side, the first point is that Indian agriculture is increasingly becoming characterized by small farmers. Fragmentation and subdivision have been steadily increasing. The number of operational holdings have nearly doubled from around 7 crore in 1970-71 to nearly 14 crore as on date. The distortion in the distribution of land holding coupled with the predominant share of small farmers, points to the need for promoting institutional arrangements designed to ensure that growth along with its diversification, benefits the small and marginal farmers.

### **Irrigation.**

The country has an overall irrigation potential of around 140 million hectares. Of this, only about 109 million ha have been created and around 80 million utilized. Although the gross irrigated area as a percentage of gross cropped area has increased from 34% in 1990-91 to 45.3% in 2008-09, a wide variation continue to persist in the irrigation coverage across states and across crops and the quality of management and maintenance of public irrigation schemes leaves much to be desired. Reforms need to be brought in urgently to stem the deteriorating performance of such schemes by involving water user associations and even unbundling large surface schemes into storage, transmission and distribution water channels at the farmer's level. Concurrently there is need to address the issue of There is also little doubt that free or low pricing of power for irrigation which has contributed to the problem. This must be done realistically and not with an eye to the public gallery.

*Groundwater irrigation* is presently the largest source of irrigation. However, it suffers from over-exploitation in most states. Excessive dependence on groundwater for irrigation has several implications – which we can ill afford – such as declining groundwater tables, drying up of wells, rise in well and pumping depths and salinity ingress.

### **Globalisation and the emerging role of corporates**

Greater assimilation of the agricultural sector with the overall economy and the integration of the Indian economy with the global economy have brought in their wake certain challenges and concerns. Three factors namely, globalization, an expanding middle class and diversification of the Indian food thali – have led to an increasing interest being taken by corporates in agriculture as a source for raw material for “agriculture value chains” and the focus is now increasingly on marketing of produce. As a result, marketing systems at various levels are gearing up to adopt best practices in procurement, storage, transport, packing and processing of food products. Food supermarkets have become a reality and it is expected that they will play an increasingly significant role in the years to come as suppliers of quality farm produce delivered in modern formats to the growing urban sector.

Indian corporates are also expected to capture larger market shares in the expanding international trade in primary commodities and processed foods. This means that they will demand increasing volumes of quality farm produce from domestic agricultural producers. The major constraint, however, is the highly fragmented nature of production and the low per capita surplus of small

and marginal farmers which, by definition, tends to limit the ability of individual farmers to access the market and leverage better returns for their produce. The answer to how small landholders can be enabled to participate and take advantage of the emerging opportunities in the sector lies in “aggregation” in all forms - whether of land or provision of agriculture and farm management services whether on the input or output side.

### **C. Other issues**

#### **Rural – urban continuum**

In addition to the structural issues discussed, other changes are also taking place at the ground level. For example, the hitherto identifiable distinction between the rural and urban sectors has gradually given way to a sort of “rural – urban continuum” characterized by the imprint of the services sector. This transformation is, in part, captured in the shift in the consumption pattern in the rural areas because rural India is now an important constituent of in the domestic consumption on account of the population residing there, its share in national income, expenditure and savings. Interestingly, farm income which used to contribute about 75% of the rural income has dropped to 30 per cent (2010). Non-farm growth which includes the services sector has been significant. It is estimated that 42% of rural households draw their income from non-farm sources.

#### **Mechanics of procurement and release of food grains.**

Agricultural growth strategy has for a long time focused mainly on the production phase. In the context of food grains policy, concerns have been raised regarding the simultaneous presence of high food inflation and large food grains stocks in our granaries. It has been argued that, in creating a better food grains policy, it is imperative to look at the entire system of food grains production, procurement, release and distribution. Thus, besides improving storage facilities there is a need to redesign the mechanics of procurement and release of food grains to the market to ensure that the impact on prices is in the desired direction. Marketing conditions also need to be improved and private sector participation encouraged by reforming the Agricultural Produce Marketing Committee (APMC) Acts.

#### **Minimum support price.**

Minimum Support Price characterised by a number of equity driven advantages, has also led to over production of food grains despite rapidly increasing food grains stocks with FCI. It has stifled diversification to other remunerative and market demanded crops as a result of which there is a need to review the food management policy. Instead of maintaining high levels of buffer stocks, an alternative strategy could be to restrict the open procurement of food grains to the minimum required for food security purposes or to bring about a balanced reduction in procurement which would lead to both crop diversification and significant savings for the public exchequer. The savings, thus effected could be used for creating a targeted and better-managed safety net for the poor or for creation of infrastructure facilities.

#### **Agricultural exports.**

India has graduated from being an imported-food-dependent country to a self sufficient nation and even a net exporter of cereals. The agricultural export basket is quite diversified and some of the billion-dollars-plus exports are that of rice, high value commodities such as fish, cotton, and fruit and vegetables. However agricultural trade in India is often subject to “stop-go” policies on account of food security concerns. There is, therefore, a need to work out strategies to increase

exports and decrease the gap by improving post-harvest technology and agricultural productivities, increasing the irrigation potential and encouraging farmers to adopt least-cost production methods through strengthening of extension services.

### **Dryland Agriculture.**

With 65% of agriculture in India being undertaken in dry land and resource poor regions requires a completely different orientation and approach to such areas. This is especially critical in the context of food security. Even with full development of water resources in the country, it is projected that about 45-50% of net sown area will always remain rainfed. While the Green revolution by-passed rainfed areas, the productivity growth is declining in irrigated agriculture, which is a matter of concern for sustaining and augmenting food grain production in the country in the coming years. In my mind there is no alternative but to harness the vast potential of rainfed agriculture for contributing to the country's food and livelihood security.

### **7. An issue of conscience**

I now come to the last part of my lecture.

I must confess that when I was asked to deliver the convocation address, a question crossed my mind as to what is the purpose of the address? Is it to celebrate the occasion of students having successfully completed their education? Is it to honour the speaker? Or is to give those of you who are going to walk out of the gates of this university today some counsel of value and worth which may, in the years to come, help you to negotiate your way in the real world?

After quite some research, the best answer I got was from our own tradition. As you know, students in olden days stayed with the teacher in his abode. This was called the Gurukula and the teacher, like your Vice Chancellor, was the Kula Guru. The practice was that when one set of students had completed their studies, they were assembled in much the same way as you are today for a final lecture before the guru dakshina. This lecture went beyond the standard curriculum and was a discourse on life itself.

At the beginning of one such last lecture, a teacher asked his assembled students as to whether any of them had any doubts which they wanted to be clarified. In response to the question, one of the graduate students got up and said "O venerable master, you have over all these years, taught us well with diligence and clarity. Notwithstanding this, there is a doubt in my mind. I am not sure O learned one, as to what is right in life and what is wrong. Please explain to me as to why one should live the life in the right way when all the evidence before my eyes points to the fact that living a wrong life is more pleasurable and more enjoyable. Master, those who live a wrong life have more wealth, more success and more power. Since this so, why should one play by the rules and live a life of virtue.

We don't know what the master answered, but while summing up my address I would like to attempt an answer by drawing on my life and sharing my findings with you. If this shared experience helps you in any way when you pass through darkness in your own life – as you must - when everything you believe in about yourself and the world stands challenged, then the purpose of this address have been more than fulfilled.

When we survey our surroundings – outside and within ourselves, the thing that troubles us, is that the values and good things taught to us by our parents, our teachers and our elders are more often professed and very seldom practiced – even by those who have preached them to us. What is worse is that those who practice the good things do not advance in life quite in the same way

as others who do not practice them. And when we try to find out why this is so, we are told not be silly simpletons and to get on with life by compromising cleverly with reality. We are told that values are one thing but life is another. That is why a helpless parent gives donation to an educational institution so that his child can have a better start in life than him, that is why we feel justified in sharing a leaked question paper, that is why we find it easier to give speed money to get our case cleared through a corrupt government machinery rather than follow the unending bureaucratic procedure, or pay the constable a baksheesh rather than the legal fine. This is what we do as individuals. And when a society does this, then unethical behavior becomes legal and accepted and no longer a matter of censure.

So the question is, why then are we taught all these wonderful things if in real life they have no operational worth?

There are no easy answers to this question. I find that through history this question has troubled mankind in all civilizations, across all geographies. And I wonder why? What is it in man that refuses to give up the ideal of a good life even as he succumbs to corruption and indulges in morally unacceptable behaviour. Why is it that even when we know we are imperfect, even when we indulge in corrupt or wrong conduct, we continue to hold as our role models those who have attempted to conquer themselves?

I do not – indeed, cannot - believe that man is inherently or genetically, bad. I think imperfect conduct arises as a consequence our circumstances, conditioning and our interface with society. In your life each one of you will pass through darkness and temptation. Each one of you will face the choice between Preyas and Shreyes, between what is pleasurable and what is right, between instant gratification and permanent good. Not even one amongst you assembled here will succeed all the time. Sometimes you will conquer, sometimes you will fall prey to temptation; sometimes you will rise above yourself and sometimes you will fall. You will fall because you are human. But remember that to fall is not a crime but to remain fallen is. The important thing is to get up each time you fall and try and walk the right path once again. I do not give you this counsel because I have studied philosophy. I say this because I have fallen countless times and I am still trying. So promise me that you too will never give up no matter how dark the night is. I pray that God gives you the strength to do so.

Jai Hind, Jai Maharashtra.