



White Paper

on

The Strategic importance of Restoration of 200% tax rebate for Breeding and Bio-technology Oriented Private-Sector Driven R&D expenses within the Seed Sector for enhancing the competitiveness of Indian farmers and seed companies

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1. Executive Summary:

The Indian seed sector has been a significant agri-system value chain stakeholder in driving & catalysing significant progress & growth of the agriculture sector over the last 7 decades. Seed is fundamental to all agricultural improvements since it has the genetic potential to increase yields and impart tolerance to abiotic and biotic stresses that have escalated due to climate change. Studies show that, the estimated direct contribution of quality seed alone to the total production is about 15-20% depending upon the crop and it can be further raised up to 45% with efficient management of other inputs.

In this context, there is a need to further support, sustain & incentivize research & development (R&D) to improve seed to mitigate the environmental threats, build resilience to climate change, conserve natural resource and address food & nutrition security proactively. The gradual reduction in tax rebate from 200% to 100%, through the Finance Act 2016, for the in-house R&D expenses within the seed and biotechnology industry, had a detrimental impact on the R&D investment of the private seed sector.

The restoration of 200% tax rebate for the in-house R&D investment of the seed sector is of strategic importance in incentivizing research and increasing the regional & global competitiveness of the Indian farmer and of the Indian seed industry. Further, it will assist India in becoming Atmanirbhar & global leader in the area of R&D within seed sector and to emerge as one of the key global seed hubs in the future.

2. Introduction:

The Indian seed sector has been a significant agri-system value chain stakeholder in driving & catalyzing significant progress & growth of the agriculture sector and strengthening it over the last 7 decades. Given the plethora of threats due to degraded farmland, pests and climate change alongside the fundamental need to redesign food systems, to conserve natural resources and to ensure the food & nutrition security of the nation and other geographies around the globe need to be reinforced with a range of enhancements to the agriculture sector, starting with seeds. Seed is fundamental to all agricultural improvements since it has the genetic potential to increase yields and impart tolerance to abiotic and biotic stresses that have escalated due to climate change. In this context, there is a need to further support, sustain & incentivize research & development (R&D) in the seed sector.

R&D, whilst being the need of the hour, is a long-drawn process, often riddled with risks given the lack of guaranteed & desired outcomes. Research involves plant breeding programs which take 5-7 years to produce a new variety, development and application of biotechnological tools like Molecular Markers, Gene Editing, Genetic Modification, etc and to test the resultant products at multiple locations in the country to check their suitability and performance in different agro climatic zones. Such research activity involves investments in manpower, infrastructure and actual research projects.

The current research investments by private seed sector are estimated at less than 3% of revenue compared to the global levels of 10-12% of revenue (1). Increase in research investments is imperative for the development of seed varieties that will enable our farmers to raise productivity and be competitive in international markets.

Given India's emerging position as a global power force to reckon with, a strong emphasis on channelizing investments in agriculture, especially at the seed level, is the need of the hour. Financial resources within the private-sector need to be garnered through various state-governed incentivization mechanisms with a strong focus on investing in R&D. The past trends were to provide this support through subsidy mechanisms which created stress on the exchequer. As an impactful & solution-driven alternative, progressive tax rebate mechanisms, as a strategic fiscal tool, could hold the key to incentivizing R&D-driven seed companies to progress on developing products that could further multiply socio-economic impact, benefitting society as a whole. The gradual reduction in tax rebate, between 2016 to 2020, from 200% to 100%, through the Finance Act 2016, for the in-house R&D expenses within the seed and biotechnology industry, had a detrimental impact on the private sector R&D investment within the seed sector.

The seed sector, with a strong emphasis on outcome-oriented research, has played a critical role in ensuring continuous supply of quality seed and new improved varieties/hybrids for enhancing & strengthening the productivity of Indian agriculture as a whole. It has catalyzed the socio-economic growth of both rural & urban economy through the emergence of small-scale seed companies and employment generation. The restoration of 200% tax rebate for the in-house R&D within the seed sector is of strategic importance in incentivizing research and increasing the regional & global competitiveness of the Indian seed industries in upgrading & uplifting the quality of seeds, with better yield potential, appropriate to different agro-climatic conditions at reasonable prices.

The reinstatement of 200% tax rebate will bring the Indian seed industry to global parity with their Asian, European and American counterparts, who are benefiting from institutionalized foreign investment in research & technology transfer, from their counterparts in developed-markets. In keeping with India's stance on building socio-economic resilience & strengthening sovereignty through reducing dependence on foreign governments/ agencies & multilateral institutions for financial & scientific assistance, the government ought to incentivize scientific seed-sector R&D to increase domestic, regional & global competitiveness. Given the huge potential of the seed sector, the restoration will further assist India becoming Atmanirbhar & a global leader in the area of R&D within the seed sector and to emerge as one of the key global seed hubs in the future.

Seed is the primary and most critical input to sustain agriculture. It is an established fact that the efficacy of all other inputs such as fertiliser, water, pesticides, irrigation mechanism etc., depends on the quality of seeds to a large extent. Multiple studies suggest that the estimated direct contribution of quality seed alone to the total production is about 15-20% depending upon the crop and it can be further raised up to 45% with efficient management of other inputs (2). Therefore, in order to keep pace with increasing demand to feed the 1.3 billion of the domestic population, our large livestock and poultry as well as to meet the emerging global demand, robust R&D ecosystem backed by strong incentivization mechanisms encouraging the private sector participation is to be emphasized upon by national authorities within the political & bureaucratic ecosystem, with the fulcrum falling under the anvil of the Union Ministry of Finance.

3. Objective:

The Union Ministry of Finance's decision with respect to tax rebate on R&D expenses on 29th February, 2016:

The Union Ministry of Finance, through an amendment in accordance with the Finance Act 2016, has gradually reduced the weighted tax deduction against expenses incurred by private sector entities on in-house Research & Development (R&D) from 200% to 150% effective from April 1, 2017 to March 31, 2020 and it further indicated the reduction to 100% from April 1, 2020. The Act applies to the eligible companies engaged in the research & development of biotechnology-oriented products & processes, alongside the manufacturing or production of any article or thing that incurs any expenditure on scientific research (excluding the cost of land) on in house R&D facility as approved by the Department of Scientific and Industrial Research (DSIR).

The core objective of this white paper is to highlight the significant need & potential impact, of the restoration of 200% tax rebate on R&D expenses for the seed sector, falling herewith under the Biotechnology bracket, across the range of stakeholders in particular & its crucial role in positioning India, at par or beyond, among its global counterparts in the subject area of seed sector.

This strategic fiscal intervention will progressively, proactively & constructively contribute towards the following:

- a. To incentivize investments in R&D infrastructure, programs and product testing at multiple locations & harness the R&D ecosystem within seed sector with access to cutting edge technologies, for enhancing the competitiveness of the Indian seed companies and bringing international parity among its Asian, European and American counterparts, who are benefiting from institutionalized foreign investment & technology transfers, from their counterparts in developed-markets.

***Voice from the ground:** ‘The seed companies are in the process of developing products based on new generation gene editing technologies that will help address the problems faced by Indian farmers due to climate changes and to compete against some of the developed countries like the US, Japan, China etc., which are in the forefront of developing new technologies in the coming years. The 200% tax rebate will surely help in strengthening the R&D base of seed companies to contribute actively towards the same cause.’*

- b. To catalyze the value chain of agriculture through improved yield & better productivity through improved seeds, appropriate to different agro-climatic conditions, at affordable prices contributing towards achieving the vision of doubling farmers’ income.
- c. To address issues emerging from geopolitical crisis in the area of food & nutrition security through improved productivity of seeds and to develop a climate-change resilient seed crops to mitigate the impact of climate change through incentivizing the share of private sector participation in the seed R&D.

***Voice from the ground:** ‘Currently, globally competitive agricultural markets are severely affected by geopolitical changes and countries are facing the challenge of food & nutrition security. Our farmers are well placed to address the challenges, provided they are supplied with quality seed material with an infusion of new technologies to address the modern-day uncertainties.’*

- d. To contribute towards building a robust & sustainable agriculture ecosystem, to attain food sovereignty which, in turn, will have its multiplier effect & impact in addressing poverty, hunger and other UNDP sustainable development goals.

***Voice from the ground:** ‘The restoration of 200% tax rebate will be of strategic importance in the application of biotech tools for precision breeding to develop precise hybrid varieties to address the issues such as yield, nutrition, pest & disease management, reducing pesticide residue etc., to contribute towards harnessing the sustainable agriculture ecosystem in India’.*

- e. It will play a significant role in scaling up of quality seed production and will assist India in achieving self-sustainability i.e., Atmanirbharta & to emerge as one of the key global agri-seed hubs.

4. Methodology:

Submissions & analysis, in this white paper, are based on the quantitative & qualitative approaches, segmented by initial secondary data & subsequent primary data. The quantitative indicators were sourced from the official website of the Ministry of Agriculture & Farmers’

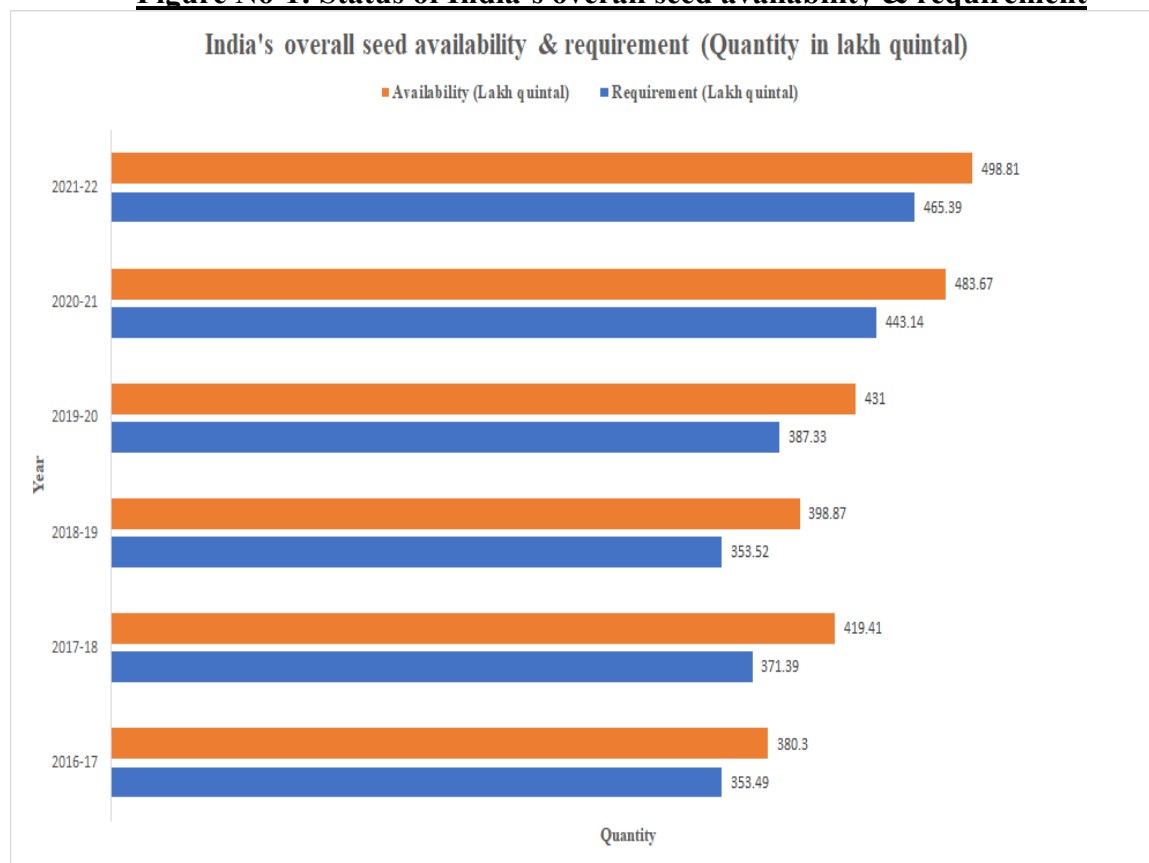
Welfare, Government of India, seednet.gov, the International Seed Federation and other reports published by credible organizations at the national & international levels. In order to understand & analyse the impact of reduction in weighted tax deduction on R&D expenses within the seed sector from 200% gradually to 100% between 2016 & 2020, surveys among 25 Indian seed companies, having a strong outcome-oriented R&D base and engaged in the production of high-performance quality seeds for food, feed & fibre, were undertaken. These seed companies are situated across India and are contributing towards the growth of the rural & urban economy through catalyzing the value chain of the agriculture sector and are also playing a crucial role in India's seed export market.

5. Empirical Evidence:

An overview of India's seed sector:

The availability of rich arable lands, diverse agro-climatic conditions, along with increasing demand to feed the 1.3 billion domestic population, amongst other progressive factors, are cohesively contributing & attributing to the growth trajectory of agriculture seed sector in India. Followed by the United States (27%), China (20%), France (8%), and Brazil (8%), India is the world's fifth largest seed market accounting for 4.4% of the global seed market (3). In terms of seed availability, it has increased from 380.3 lakh quintals in 2016-17 to 498.81 lakh quintals in 2021-22, registering a rise of more than 100 lakh quintals over the last 5 years. Furthermore, it has produced, on an average a surplus of approximately 35 lakh quintals against the requirement level every year between 2016-17 & 2021-22 (refer figure no-1).

Figure No-1: Status of India's overall seed availability & requirement

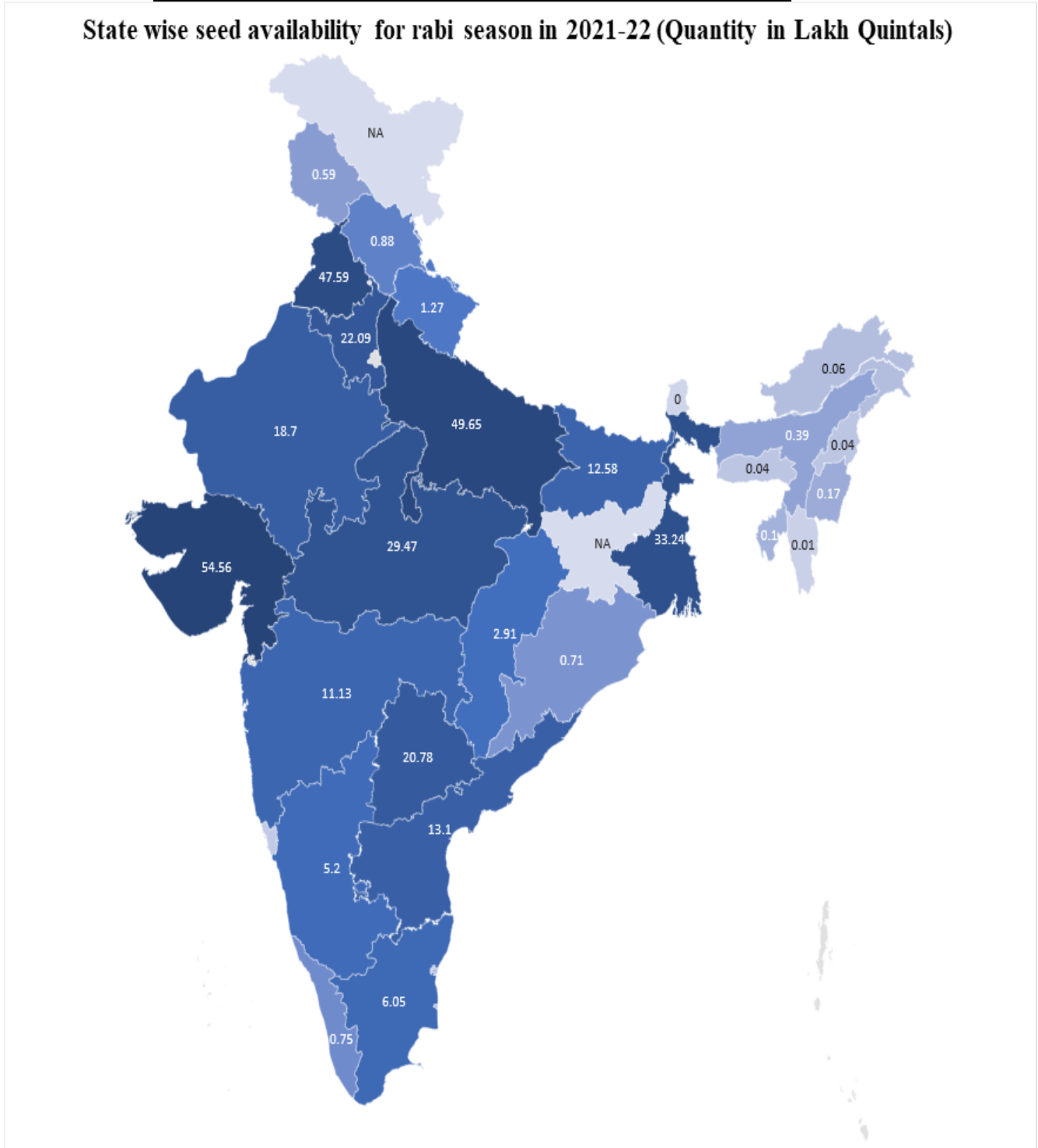


Data Source: Seednet.gov

Graphical presentation by PARC

Gujarat, Uttar Pradesh, Punjab & West Bengal are the top 5 states in India, in terms of Rabi seeds availability (refer figure no-2) and in terms of kharif seeds, the top 5 players are Madhya Pradesh, Andhra Pradesh, Maharashtra, Telangana & Karnataka (refer figure no-3).

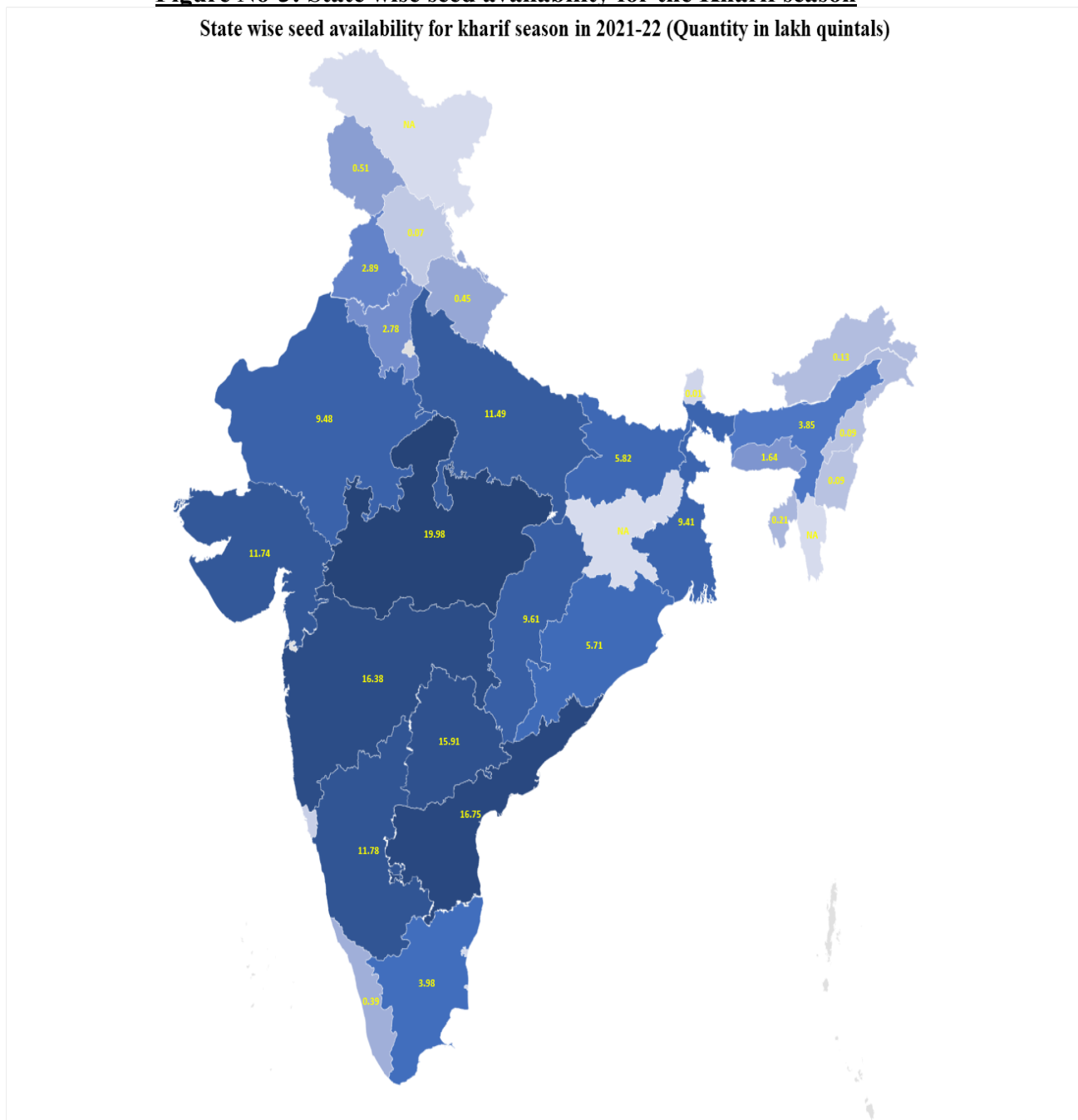
Figure No-2: State-wise seed availability for the Rabi season



Source: Seednet.gov
Graphical presentation by PARC

Figure No-3: State wise seed availability for the Kharif season

State wise seed availability for kharif season in 2021-22 (Quantity in lakh quintals)



Source: Seednet.gov

Graphical presentation by PARC

The share of the public sector in seed production has reduced from 42.72% in 2017-18 to 35.54% in 2020-21, while the share of the private sector grew from 57.28% to 64.46% during the same period, highlighting the rising role of private companies in India's seed sector (4). The Federation of Seed Industry of India (FSII) claims that the Indian seed industry is worth INR 22,000 crore and is constantly growing but the share of India's

seed export in the global seed trade is less than 1% (4). An encouraging & actionable regulatory framework backed by a strong progressive incentive mechanism, in terms of restoration of 200% tax rebate for R&D expenses, within the seed sector shall play a critical role in accelerating India's seed export and emerging it as one of the key global seed hubs in the future.

5.1. Impact of reduction in tax rebate on R&D expenses within the seed sector:

a. Adverse impact on the investment of new research projects:

The reduction in tax rebate has had a negative impact on seed companies' capacity to invest in new research projects. The reduction in tax rebate has affected the cash flows as well as reduced the Return-on-Investment. On account of this, the Indian seed companies are finding it increasingly challenging in continuing their existing/ongoing R&D projects. Furthermore, it has demotivated the companies to explore new R&D projects. The Indian seed sector invests the most in crop improvement for disease resistance and abiotic stress tolerance. Delays in the R&D negatively impact the crop yield and quality of the produce.

Voice from the ground: 'Reduction in tax rebate had negative impact on the research activities and there is no motivation for further R&D investment.'

b. Impacted crop diversification, innovation & other R&D activities:

The reduction in tax rebates has had a negative impact on the range of R&D activities, strategically vital for growth, within Indian seed companies. It has affected the investment in developing drought tolerant technologies, gene editing technologies to address the sensitivity of seeds to climate changes, crop diversification activities etc., impairing the Indian seed companies' capacity to contribute towards building a robust sustainable agriculture ecosystem.

Voice from the ground: 'While we continued to spend on R&D, there was a greater emphasis on cost optimization rather than increased spending on diversification of innovation.'

c. Impacted the upgradation & development of R&D infrastructure:

The success of R&D is also heavily dependent on the availability of adequate & robust R&D infrastructure coupled with world-class technologies to develop new varieties/hybrids. Due to lack of fiscal incentivization, Indian seed companies have reduced their rate of capex investments in the crucial & critical components of R&D infrastructure. On account of this, modernization & development of poly house, biotech labs & other laboratory facilities were delayed or put on hold, leading to a negative impact on the growth of the overall seed sector.

Voice from the ground: 'Much-needed modernization of research labs to meet the needs of the world standards has been postponed.'

Voice from the ground: 'With a reduction in tax rebate, there has been a general reduction in the rate of taking up capex investments for lab infrastructure.'

Voice from the ground: 'Due to lack of incentive poly house development was delayed and biotech lab proposal is also put on hold.'

d. Impacted the Indian seed companies' capacity to explore global markets:

The reduction in tax rebate has curtailed the capacity of Indian seed companies to get access to cutting-edge technologies for developing more productive & new traits of global standards into seed varieties & hybrids, appropriate for different agro-climatic conditions across the globe. The current research investments by private companies are estimated at less than 3% of revenue (1) and needs to be increased to develop seed varieties which will help our farmers to be competitive in international markets. Thus, the increased tax outflow has become one of the major hurdles towards accessing state-of-the-art & cutting-edge technologies to develop seeds of global standards required to explore new markets outside India for increasing their export share.

***Voice from the ground:** 'The reduction in tax rebate impacted our investment in R&D. The tax benefit would have passed on to our investment in R&D. We could have extended our activities to neighbouring countries.'*

***Voice from the ground:** 'Increased flow of funds in R&D activities will lead to developing new competing products (seeds) for the global markets.'*

e. Impacted small-scale seed companies:

The reduction in tax rebate has had drastic impact on the ability & viability of small-scale seed companies to remain competitive at the regional & national level. Reduction in tax rebate led to limitations of cash flows, resources, technological challenges in terms of infrastructure & laboratory support, pathological study support as well as collaborative exchange of genetic resources etc., for small scale seed companies to continue & undertake the ongoing & new R&D projects. This further jeopardizes their ability to survive, as they can differentiate themselves, only if, they emphasize more on R&D.

***Voice from the ground:** 'The reduction in tax rebate has adversely affected the small-scale seed industries' ability to spend on the R&D projects as well as towards adopting new technologies on account of increased tax outflow.'*

5.2. Why 200% tax rebate is important?

a. To mitigate risk & bring in a certain degree of relief by building resilience against uncertainty & enhance the competitiveness of Indian seed companies:

The R&D activities within the Indian seed sector are of long-term in nature with a high degree of uncertainty in terms of return on investment. It includes the high costs in terms of testing & trial programs in multiple locations, setting up R&D infrastructure with modern equipment, cost of regulatory compliances, R&D land lease cost, cost of both skilled & unskilled labourers etc. The restoration of 200% tax rebate is of strategic importance in providing certain degree of relief against this huge cost as well as in enhancing the competitiveness of Indian seed companies among their Asian, European & American counterparts who are benefiting from a progressive fiscal regime through a well-incentivised tax rebate mechanism, institutionalized foreign investment & technology transfers from counterparts in developed-markets.

***Voice from the ground:** 'Investment in R&D is a continuous process for a longer period of time. Sometimes projects do not deliver the desired outcomes. To overcome these challenges a*

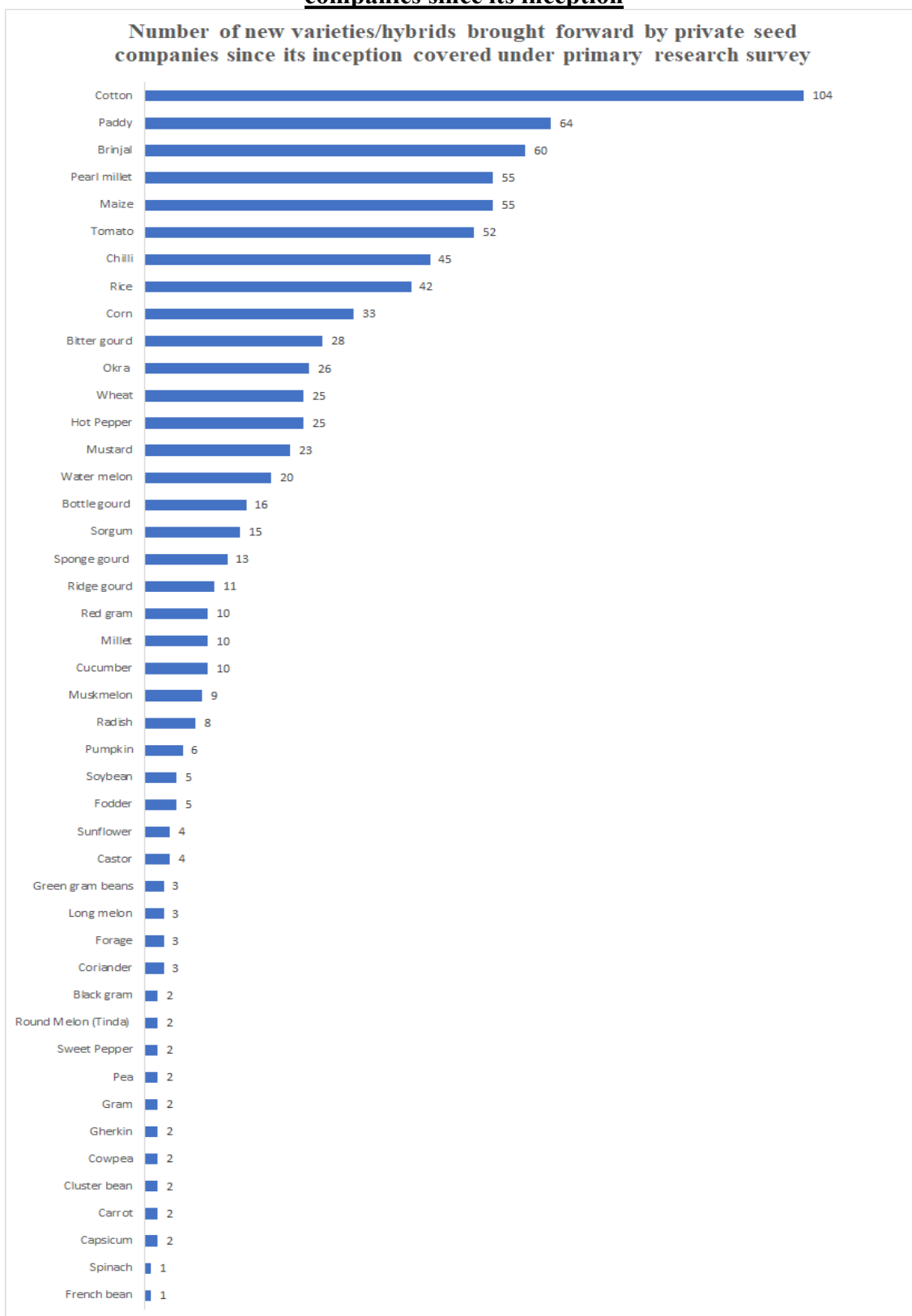
rebate from the government helps us to keep ourselves motivated and continue investing in R&D with the same level of enthusiasm.'

Voice from the ground: *'The need of the hour is to develop products having traits like draught and disease tolerance etc. To add these traits is an expensive affair and the 200% tax rebate will surely motivate us to increase our R&D spending in such areas.'*

b. Encouragement to MSMEs:

The small-scale seed companies focus more on undertaking R&D activities of indigenous & region-specific seed crops which are rich in nutrition & crucial for addressing the food & nutrition security of India. Our primary research survey revealed that some of the innovative MSMEs in the seed sector spend as high as 8% of their annual turnover on R&D for the development of new varieties/hybrids. This clearly underlines the fact that innovation is the one factor that is required for the enterprises to differentiate themselves to succeed. Figure No-4, details the list of crops for which new varieties/hybrids were brought forward by the seed companies covered under primary research survey.

Figure No-4: Number of new varieties/hybrids brought forward by private seed companies since its inception



Source: PARC's research

The restoration of 200% tax rebate will play a critical role in accelerating the growth of small-scale seed companies with access to new age technologies, strengthening their R&D base as well as enhancing their competitiveness both at the regional & national levels. Furthermore, it will enable them to get benefited from market opportunities at the global level.

***Voice from the ground:** ‘Indian small scale seed industries focus on developing seeds of regional-specificity. Restoration of (200%) tax rebate is much important for increasing the share of small-scale seed industries’ participation in R&D, helping them to remain competitive at regional & national level as well as to contribute towards the food & nutrition security of India.’*

c. Addressing the food & nutrition security of India:

The progressive tax rebate mechanism through the restoration of 200% tax rebate, could be strategically instrumental as a strategic fiscal tool in incentivizing R&D-driven seed companies to progress on developing new seed varieties/hybrids which are rich in nutrition, appropriate to different climatic conditions to mitigate the impact of climate change, address the emerging issue of food & nutrition security, as well as to address increasing agriculture supply chain constraints on account of geopolitical crisis. Some of the critical crops for food and nutritional security include open pollinated crops like wheat, soybean, pulses and some oilseeds that are in dire need of research investment for developing superior varieties. To encourage the participation of the seed industry in these crops, research investments by private industry specifically needs to be incentivized. The restoration will also play a strategic role in developing next-generation technologies within the seed sector designed precisely to address the other emerging issues in the area of agriculture.

***Voice from the ground:** ‘The company is engaged in developing bio-fortified, staple crop seeds in collaboration with various national & international level institutes such as ICRISAT, BIRAC etc. The new hybrids and varieties which are rich in essential nutrients such as vitamins and minerals will help in addressing the issues related to nutritional security of India.’*

***Voice from the ground:** ‘Increased investment in R&D will improve efficiency in developing hybrids with increased yield contributing to food & nutritional security.’*

d. Catalyzing the value chain of agriculture:

The seed sector has remained as one of the significant stakeholders of the agri-system value chain in India. Building a robust R&D ecosystem within seed sector is of strategic importance not only for accelerating the competence level of Indian seed sector, among its global counter parts but also for catalyzing the entire agriculture value chain with improved yield & better productivity of global standards to meet the day-to-day evolving challenges of agriculture sector.

***Voice from the ground:** ‘The 200% tax rebate will incentivize us to increase our investment in the area of research. Investments in R&D are certainly important for the development of new R&D products which will suit under different climatic conditions and give higher yields. This improved seed quality will help us to be on a parallel line with the agriculture activities of advanced countries.’*

***Voice from the ground:** 'Restoration of 200% tax rebate is need of the hour to further strengthen and invest in R&D to develop products that meet the challenges evolving in agriculture.'*

e. Catalyzing human capital empowerment & development as well as socio-economic growth:

Given that R&D within the seed sector is long-term in nature, continuous upgradation of both skilled & unskilled manpower through training & learning programs in collaboration with national & international level institutes, is crucial to ensure successful completion & availing the desired outcome of the R&D projects. The cost involved to undertake the skill development programs both in terms of technical & non-technical is also part of R&D investment. Restoration of tax rebate shall facilitate the required cash flows for the seed companies to provide skill development programs for its manpower which in turn will add to the human capital empowerment & development having its multiplier effect on expediting the socio-economic growth of rural as well as urban economy.

***Voice from the ground:** 'Investment in R&D also include continuous upgradation of skilled manpower in terms of training & learning programs. This in turn will lead to human capital empowerment as well as employment generation, engendering exponential impact on socio-economic growth.'*

f. Contributing towards the vision of doubling farmers' income:

The Indian seed companies are rigorously working & investing in the area of R&D with a focus to develop new technologies to enable farmers to get a better price for their agri-produce (with improved seed productivity at low cost) and compete in global markets. With a gradual reduction in tax rebate, Indian seed companies faced a severe financial crunch for further investments to continue the existing projects leading to commercialization. This in turn has slowed down the investment towards R&D expenditure leading to delays in the introduction of new technologies and improved crop varieties for farmers. Yields have stagnated or come down in many crops (for example: cotton) Restoration of 200% tax rebate will motivate the industry to re-invest in R&D projects and shall play a catalytic role in delivering new technologies in the area of seed sector pertaining to benefit farmers and contribute towards the vision of doubling farmers' income.

5.3. Comparative analysis of the R&D in Agriculture sector:

The importance of R&D investment in agriculture can be elucidated by studying other global agrarian economies. Agricultural research spending in Latin American countries has grown steadily over the past decades. The region was able to achieve the minimum UN target of investment at least 1% of agricultural GDP in agricultural R&D. However, there are considerable differences across countries: while Brazil, Uruguay, Argentina and Chile spend well above 1% of their agricultural GDP on agricultural R&D, (5), India's spending on agriculture research still hovers around 0.40% of agriculture GDP (6).

Table No-1, Details the progressive tax rebate mechanism for R&D expenses across the sectors under some of the leading countries that are playing major roles in the area of R&D ecosystem.

Table No-1: Incentives for R&D activities across sectors:

Jurisdiction	Names of incentives	Incentive types	Description of benefits
Brazil	R&D deduction	Super deduction	<ul style="list-style-type: none"> • A super deduction of 160% to 200% is available to taxpayers with eligible expenses. • A super deduction of up to 250% of eligible expenses for innovation projects executed by Scientific and Technological Institutions is available.
Hong Kong	Enhanced R&D deduction	Super deduction	300% deduction for the first HK\$2 million, and the remainder deductible at 200% without limitation for qualifying R&D expenditure on a qualifying R&D activity.
United Kingdom	Super deduction	Enhanced tax deduction over and above the usual corporation tax deduction	R&D incentive is currently available for SMEs as an enhanced deduction of 230% from 1st April, 2015 of qualifying spend. This deduction is available before tax as a deduction against taxpayers' profits chargeable to corporation tax.
Poland	R&D tax relief – additional decrease in tax base by R&D costs	Tax deduction	From 2022, 200% of employee costs of the R&D work carried out and 100% of other eligible costs may be additionally deducted directly from the tax base (200% for entities holding R&D center status).
Singapore	Enhanced R&D deduction	Super deduction	Provides 250% enhanced deduction on qualifying R&D expenditure incurred on qualifying R&D projects in Singapore for Year of Assessments 2019 to 2025.
Indonesia	Super deduction	A reduction in gross revenue	A reduction in gross revenue of a maximum of 300% of the total expenses incurred for certain R&D activities in Indonesia.

Source: Respective country's tax laws

The above table clearly highlights that the countries who are playing a significant role in incentivizing investments in R&D are following the progressive tax rebate mechanism, with the tax rebate rate falling under the range of 200% to 300% to incentivize the private sector participation & increase their share in the area of R&D to contribute for the country's growth & development.

Hence, it is imperative for India to restore 200% tax rebates for the in-house R&D expenses especially within the seed sector, with a modus operandi that ensures implementability, measurability & accountability to keep the checks & balances in place and to avoid the exploitation of the R&D tax rebate benefit. Following are the checks & norms that the government can follow while extending 200% tax rebate benefits on R&D expenses for the seed companies.

- The Government of India can have a national list of companies that avail the 200% tax deduction on R&D expenditure.
- After every 7-10 years, listed companies can be reviewed to determine if they can continue to qualify for tax benefits.

6. Conclusion:

India at the G20 agriculture meeting highlighted the fact that there is a need to increase investment in agricultural R&D amid the challenges of climate change and expected increase in food demand by 2030 (7). As per the economics survey 2021-22, every rupee spent on agricultural research & development, yields much better returns (11.2), compared to returns on every rupee spent on fertilizer subsidy (0.88), power subsidy (0.79), education (0.97) or on roads (1.10). Further, it is estimated that the direct contribution of quality seed alone to the total agriculture production is about 15-20% depending upon the crop and it can be further raised up to 45% with efficient management of other inputs (2).

Hence, incentivizing R&D within the Indian seed sector is vital and one of the fundamental tools for catalyzing the overall development of agriculture (in particular) & the country (as a whole) through its multiplier effect in terms of enhancing the quantity & quality of agricultural outputs, addressing the food & nutrition security, increasing the income source, achieving the sustainable growth, addressing the poverty, accelerating the rural & urban economic growth along with socio-economic progress.

The past trends suggest the fact that the state-governed incentivization mechanism followed subsidy as a tool to garner financial resources within private sector, creating stress on the exchequer. Progressive tax rebate mechanisms, through restoration of 200% tax rebate, as a strategic fiscal tool, could hold the key to incentivizing R&D-driven seed companies to progress on developing seed products that could further catalyse & contribute to making India Atmanirbhar & Global leader in the seed sector.

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