

WELCOME BUDGET

Laparoscopic Day: Honoring Advances in Modern Surgery

The Union Budget 2025, presented by Finance Minister Nirmala Sitharaman, marks a significant step towards bolstering India's economic growth, enhancing infrastructure, and addressing social challenges. In this Budget, the government focuses on long-term economic stability, empowering sectors like agriculture, manufacturing, and technology, and fostering inclusivity through targeted welfare programs.

The Budget outlines an ambitious plan to achieve 7-8% annual growth by focusing on strengthening key sectors, such as manufacturing, services, and exports. The government's fiscal deficit target remains under control, with an emphasis on maintaining fiscal discipline while pushing for higher public investment in infrastructure. The fiscal deficit for 2025-26 is projected at 5.4% of GDP, signaling a careful balance between stimulating the economy and maintaining fiscal prudence.

A significant chunk of the Budget is allocated for infrastructure development, with Rs 10 lakh crore earmarked for projects in roads, railways, ports, and airports. This will improve connectivity, enhance productivity, and attract foreign investments. The government also plans to invest in smart cities and green energy, encouraging the transition to sustainable development practices.

Recognizing the importance of the agriculture sector, the government has introduced measures to enhance the income of farmers, such as increased allocation for the PM-KISAN scheme and subsidies for agricultural technology and inputs. Special focus has been given to irrigation and water conservation initiatives. The budget also includes initiatives to promote organic farming, increase exports of agricultural products, and provide financial support for rural infrastructure.

In a bid to simplify the tax regime, the government has introduced measures to streamline compliance and ease the burden on taxpayers. The individual income tax slabs have been revised, providing more relief to middle-income earners. The new tax regime has been further incentivized, with rebates and lower rates for individuals. Corporate tax rates have been adjusted to encourage business growth, with specific incentives for startups, MSMEs, and export-oriented industries. Additionally, efforts have been made to curb black money and ensure transparency in financial dealings.

The Budget also places a high priority on healthcare, education, and social welfare. A substantial increase in funding for the healthcare sector is planned, with a focus on building new healthcare infrastructure, improving access to medical services, and enhancing public health programs. There is also a focus on expanding the Ayushman Bharat scheme to ensure healthcare for all sections of society.

In the education sector, the government aims to create more opportunities for skill development and digital education, with investments in both rural and urban areas. The allocation for scholarships, research, and higher education institutions has been increased to provide better opportunities for India's youth. As climate change becomes an ever-growing concern, the government has introduced various green initiatives in the 2025 Budget. Investments in renewable energy projects, electric vehicles, and energy-efficient technologies are set to increase. There is a focus on achieving net-zero carbon emissions by 2050.

■ PROF. (DR.) VIKAS SHARMA & DR. ABEEDA MUSHTAQ



Laparoscopic Day, celebrated every year on the last Sunday of January, is an event dedicated to recognizing and honoring the importance of advancements in surgical techniques, particularly the development and use of non-invasive, minimally invasive procedures. The day focuses on promoting awareness and education about the evolution of laparoscopic surgery, the benefits it brings to patients and how it has transformed the field of medicine. Laparoscopy, which involves using a small camera to perform surgery through tiny incisions, was first introduced in the 1960s and quickly gained recognition for its ability to reduce recovery time, minimize scarring and lower the risk of complications. However, as its use became more widespread, concerns arose regarding the risks and long-term effects, particularly in complex surgeries or in patients with certain conditions. These concerns spurred the creation of Laproscopic Day, which aims to foster discussions around alternatives to traditional laparoscopy, such as robotic-assisted surgery and natural orifice transluminal endoscopic surgery (NOTES).

Laparoscopy is a diagnostic and therapeutic procedure widely used in medicine. It involves the insertion of a laparoscope through small incisions, allowing surgeons to view the internal organs on a screen. This method is commonly employed for diagnostic purposes, such as identifying the cause of abdominal pain, infertility, or unexplained bleeding, as well as for therapeutic purposes, like removing the gallbladder, treating endometriosis, or performing bariatric surgeries. This approach reduces post-surgical complications such as infections, shortens hospital stays and leads to quicker recovery periods for patients.

The history of laparoscopy dates back over a century. Its origins can be traced to the early 1900s when German physician Georg Kelling performed the first experimental laparoscopic procedure on a dog. However, it wasn't until the 1960s and 1970s that the technique gained traction for human surgeries, thanks to advancements in medical technology and the development of more sophisticated laparoscopic equipment. The introduction of video cameras in the 1980s revolutionized the field, allowing surgeons to view detailed images on monitors and perform more complex procedures with precision. Today, laparoscopy is a cornerstone of minimally invasive surgery, widely used across various medical disciplines.

Treatment through laparoscopy extends beyond diagnostics. The procedure allows surgeons to perform various operations, including removing cysts, tumors, or diseased organs, repairing damaged tissues and treating conditions like ectopic pregnancies. Robotic-assisted laparoscopy, a more recent innovation, enhances surgical precision, offering improved outcomes for patients. The recovery process is generally swift, with most patients returning to normal activities within a few days to weeks, depending on the complexity of the procedure. Postoperative care typically includes managing minor discomfort, monitoring for signs of infection and following dietary and activity guidelines.



Certain groups of patients are more likely to require laparoscopic treatment due to the nature of their medical conditions. Women suffering from gynecological issues, such as endometriosis, ovarian cysts, fibroids, or infertility, are common candidates for laparoscopy. It allows doctors to diagnose these conditions and, in many cases, treat them during the same procedure. Patients with abdominal or pelvic pain of unknown origin may also benefit from laparoscopic exploration to determine the cause of their symptoms. Additionally, those with gastrointestinal problems, such as appendicitis, gallstones or hernias, may need laparoscopic surgery for diagnosis or treatment. Laparoscopy is also a valuable tool in oncology for staging cancers, removing tumors, or obtaining biopsies to guide further treatment.

Another group that often requires laparoscopic intervention includes individuals with obesity or metabolic syndrome opt for weight-loss surgeries, such as laparoscopic gastric bypass or sleeve gastrectomy. These procedures are minimally invasive and have been shown to significantly improve health outcomes for people struggling with obesity-related complications like diabetes, hypertension and sleep apnea. Similarly, patients with chronic diseases, such as inflammatory bowel disease or liver cirrhosis, may require laparoscopic procedures to assess the severity of their conditions or manage complications. Despite its benefits, laparoscopy has been surrounded by taboos and misconceptions, particularly in the early days. Some skeptics doubted its efficacy, believing that small incisions might compromise surgical outcomes. Others feared that the technique was too complex or risky compared to traditional open surgery. In certain cultures, taboos about medical interventions, particularly those involving internal organs, have further complicated the acceptance of laparoscopy. Over time, education, awareness campaigns and success stories have dispelled many of these myths, leading to its widespread acceptance as a safe and effective surgical method.

Laprosopic Day, celebrated on the last Sunday of January

Boosting Strawberry Cultivation

■ DR. BANARSI LAL

Strawberry (*Fragaria x ananassa*) is among the most important fruit crops produced globally with an increase in area of 20 per cent from 2011 to 2021.It is one of the most popular crops in the world. The growth responds to the increasing demand of red fruits and consumers awareness of their nutritional value and antioxidant properties. Strawberry production is challenged by the several abiotic and biotic stresses such as drought ,soil salinity and diseases. The strawberry plant belongs to Rosaceae family and genus *Fragria* having chromosome number (2n=56).It is a short day plant, monocious, low perennial herb and short duration crop.In India it is grown. It is greatly influenced by various factors such as temperature, humidity, irrigation, light, type of soil etc. This fruit is rich in vitamin C and commonly eaten fresh as a dessert fruit and can be preserved for many ways.The cultivated large fruited strawberry (*Fragaria x anananna*) was originated in Europe in the 18th century. Most of the countries developed their own varieties in 19th century suitable for their climate, day length, altitude etc. China is the largest

producer of strawberry in the world. The berries are handpicked directly into small baskets and crated for marketing or put into trays for processing. It is a perishable crop and require cool dry storage.

Reasi district of J&K is primarily known for the cultivation of field crops such as maize, wheat, mustard, chick-pea, turmeric, garlic, onion etc. This is a hilly district and about 94 per cent area of the district is rainfed. The soil of the district ranges from sandy loam to loam. The district receives average annual rainfall of 1100 mm. All the rainfall drains and forms uncontrolled flow which ultimately falls into the Chenab river which is considered as a big water body in the district. This district has varied climate ranging from temperate to sub-tropical. Rainfall is heavy and well distributed from June-September. Rainfall is moderate in other months. Sometimes dry spell also prevails in the district. Mountainous terrain and high peaks in the district are the main factors for the climate variation in the district. Summers are generally warm and winters cold with snowfall in higher altitudes. There are very less water harvesting units in the district. This district can

be considered as the gold-mine of high-value horticultural crops. The size of land holding is very small and crops productivity is low. The income of the farmers is low. So, there is need to explore new options for the farming community so that their income can be enhanced and livelihood can be sustained. It was observed by the KVK, Reasi scientists that strawberry can be a good venture for the farmers to increase their income and employment. Strawberry has immense scope in the district as there are many religious spots in the district and tourists visit throughout year in the district. There are also many police and army camps in the district who can also purchase the farm produce. It was observed that strawberry can transform the socio-economic status of the farmers of hilly areas.

Strawberries are the popular soft fruits liked by everyone. Over the years the consumption of strawberries as fresh fruit has increased. Strawberries can be grown in the plains as well as hilly terrains at an elevation of 3000 m. Strawberries may offer quickest returns to the farmers in the shortest possible period. Strawberry is rich in proteins, calcium, phosphorus, potassium and

vitamins such as A, B1, B2 and C. It is considered as the natural source of antioxidants. It is also anticarcinogenic and anti-diabetic. It is sodium free, fat free , cholesterol free and low calirie packed with fibre and plyphenols. It can also be used in making jam, jelly ice cream, soft drinks etc. Strawberry is a low growing plant and is planted at a spacing of 60x30 cm accommodating 50-60 thousands plants/ha. One ha field can yield about 150 qt/ha of strawberry fruit. From one ha of area of strawberry, farmers can generate about Rs.8 lakh within six months. Strawberry crop is care intensive and requires irrigation at regular intervals. Honeybees are the main insect pollinators. It is a short stature and short duration crop. It can be sown in the inter spaces of orchards. By doing so farmers can get the additional income. It is in tune to doubling farmer income though horticulture. Most of the cultivars of strawberry produce hermaphrodite flowers and are self fertile. However, some also produce male or staminate, imperfect and pistilate flower which requires cross-pollination. If proper care in planting and application of irrigation water is taken, then it does not interfere in flowering process in

the other orchard crops. The other Rabi crops namely wheat, coriander, mustard etc. which even in winter requires irrigation whereas orchard crops such as mandarin has no water requirement and they interfere with the flowering process which usually appears during February-March.

Jatinder Singh progressive farmer from Bhabber village of Reasi district has given a new ray of hope for the other farmers of Reasi distt. by growing the strawberry in a scientific way. His village is endowed with the climatic conditions suitable for strawberry crop. He was guided and trained by the KVK, Reasi, SKUAST-J scientists and Deptt. of Horticulture to grow the strawberry commercially. He was guided by the scientists to cultivate the strawberry under polythene mulching sheet as the yield under polythene mulching sheet can be obtained higher than open conditions. Mulching in strawberry minimizes the freezing injury, suppresses weed growth and more importantly reduces the chances of softening of fruits. The Chandler variety of strawberry was suggested as it gives higher yield and is suitable in the area. Organic package of practices were also suggested to the

farmers to grow the organic strawberry. He was also educated on the vernicomposting technique and organic formulations. Biofertilizers for strawberry cultivation were provided by the KVK Reasi scientists. He was also guided on the preparation of Jeevamrit, Beejamrit, mulching etc. Literature on organic farming was also provided to him. He guided to grow the strawberry on raised bed by using the polythene sheets. Now he sells his strawberry in the local markets. He was facilitated to sale his farm produce at a good price. Many other farmers are showing inclination towards strawberry cultivation. As strawberry is a new crop in the area, farmers have shown keen interest in its cultivation. This crop can help the farmers to enhance their farm income. There is need to develop strawberry hubs in the district so as to take this crop on a larger scale. Strawberry cultivation can help in the holistic development of the farmers of the district and farmers can fetch more returns by growing it commercially. Value addition in strawberry can open some new avenues of income and employment in the rural areas.

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UNION BUDGET 2025: Focusing Garib, Yuva, Annadata and Nari Shakti (GYAN)

■ DR. PARVEEN KUMAR

In the backdrop of resilience and growth potential shown by the country, the Union Budget presented by Nirmala Sitharaman on the first day of second month of this year unveiled the government plans to guide the country towards long term sustainable growth. Prime Minister Narendra Modi in a cabinet meeting had highlighted the focus of government on fulfilling the aspirations of the poor, farmers, women, and youth, representing the core values of GYAN (Garib, Yuva, Annadata, and Nari Shakti). Indian growth despite so many pressures and pulls over the past few years has also been acknowledged by various international bodies. A United Nations report states that South Asia's economic growth will remain strong with India playing a key role in this progress. The report praises India's strong performance as a major contributor to the region's economic growth.

The Union Budget 2025 was Finance Minister's record eighth budget and the first full budget of present government which also is being led by Narendra Modi for the third consecutive time. As usual, the Economic Survey, a pre-budget document that analyzes country's economic performance over the previous year and is presented a day before the presentation of Union Budget reported that India's economy is likely to grow at 6.3-6.8% in 2025-26. The GDP growth rate is estimated to slip to 4 year low of 6.4 % in the current fiscal year ending March 2025. The Economic Survey also underlined that if the country is to become a developed nation i. e Viksit Bharat, it has to grow at 8% for the next two decades. To achieve the goal of Viksit Bharat and maintain a growth rate of 8% for the next two decades, the investment rate must rise to 35 per cent of GDP from the present 31 per cent. The highlights of the Union Budget 2025-26 are as mentioned below:

**Investing in Peoples:** The Finance Minister emphasized investment as the third engine of growth, which includes investing in people, the economy, and innovation. As part of investing in people, the government is focusing on the Sashakt Anganwadi and Poshan 2.0 programs, which provide nutritional support to over 8 crore children, pregnant women, lactating mothers, and around 20

lakh adolescent girls in aspirational districts and the Northeast region. The cost norms for these programs will be enhanced.

**Relief to Middle Class:** Union Finance Minister Nirmala Sitharaman in this budget has announced an increased income tax exemption for income up to Rs 12 lakh per annum. This means that people who earn under Rs 12 lakh per annum will not have to pay any taxes. "The middle class provide strengths to the economy.

**Increasing competitiveness of Footwear and Leather industry:** To boost the productivity, quality, and competitiveness of India's footwear and leather sector, a focused products scheme will be introduced to support design capacity, component manufacturing, and machinery required for producing non-leather quality footwear; in addition to supporting leather footwear and products. This scheme is expected to create employment for 22 lakh people, generate over Rs 400 crore, and achieve exports of over Rs 1.1 lakh crore.

**Health:** Patient assistance programs run by pharmaceutical companies will be fully exempt from Basic Customs Duty (BCD), provided the medicines are supplied free of cost to the patients. Additionally 13 new patient assistance programs will be included in the exemption list. To provide relief for cancer patients, those suffering from rare diseases, and chronic conditions, the government will add 36 life-saving drugs to the list of medicines fully exempt from basic customs duty. Six life-saving medicines will be added to a list with a concessional customs duty of 5%. Full exemption and concessional duty will apply to bulk drugs used for manufacturing these medicines. Budget 2025 Live Updates: The Finance Minister has also announced the establishment of daycare cancer centres in all district hospitals over the next three years to enhance cancer care accessibility. In FY 2025-26 alone, 200 centres will be set up. To further strengthen healthcare sector; 10,000 additional seats will be introduced in medical colleges and hospitals in the coming year; as part of a broader plan to add 75,000 seats over the next five years.

**Formalizing Gig economy:** Gig economy refers to the workforce that is engaged in temporary or freelance work. Gig workers are

mostly working on a part time basis as a way to earn supplementary income. As they are largely unorganized, they are often exploited and face exclusion. To formalize the gig economy Finance Minister has come up with a provision for registration and identity cards. This will ultimately enhance social security and also ensure that the benefits of various government schemes are availed by them.

**Electronic Equipment Industry:** To bolster the domestic electronic equipment industry, creating opportunities for youth, a national framework will be developed to guide states in promoting Global Capability Centers (GCCs) in emerging Tier-2 cities, focusing on talent availability; infrastructure upgrades, bylaw reforms, and industry collaboration. Additionally, the government will enhance infrastructure and warehousing for air cargo, particularly for high-value perishable horticultural produce. Cargo screening and customs protocols will be streamlined to improve efficiency.

**'Made in India' brand Toys:** Finance Minister Nirmala Sitharaman has also announced measures to make India a manufacturing hub for toys. For this a scheme will be implemented to build a national action plan for toys, focusing on the development of clusters, skills, and a manufacturing ecosystem. This will help create high-quality, unique, innovative, and sustainable toys that represent the 'Made in India' brand,"

**Nuclear Energy Mission:** A Nuclear Energy Mission to drive India's transition towards clean energy has also been announced. The government has set up a goal of developing at least 100 GW of nuclear power by 2047. For this the government also plans to facilitate greater private sector participation by making the necessary amendments to the Atomic Energy Act and the Civil Liability for Nuclear Damage Act. Additionally, a dedicated research and development initiative for Small Modular Reactors (SMRs) will be launched with an outlay of Rs 20,000 crore. As part of this mission, at least five indigenously developed SMRs are expected to be operational by 2033.

**Urban Challenge Fund:** Creation of a Rs 1 lakh crore Urban Challenge Fund to drive the transformation of cities into growth hubs, support creative redevelopment, and enhance water and sanitation infrastructure is also a key announcement in the budget. This fund will finance up to 25% of the cost of bankable projects, with a requirement that at least 50% of the funding comes from bonds, bank loans, or public-private partnerships (PPPs). An initial allocation of Rs 10,000 crore has been proposed for the fiscal year 2025-26 to kick start the initiative.

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**Agriculture:** For the agriculture sector, budget 2025-26 focuses on seeds, cotton, pulses. It talks development of 100 districts which lack behind on important agricultural parameters through Dhan Dhanya Krishi Yojana, enhanced support to entrepreneurs and MSMEs, enhancement of loan limit under KCC to five lakhs from three lakhs, establishment of a gene bank, a national institute of Food Technology, Entrepreneurship and Management and Mahana Board in Bihar and besides setting up of a Urea plant in Assam.

Finance Minister started his budget address with, 'together, we aim to unlock India's potential and the Union Budget 2025-26 continue the efforts of the government to accelerate growth. She concluded by saying that this budget is dedicated to accelerating growth, driven by our aspirations for a 'Viksit Bharat.' Let us all contribute in reshaping the future of our country to achieve the goal of making country Viksit Bharat by 2047 by empowering Garib, Yuva, Annadata and Nari-Shakti (GYAN). (The author is a Scientist at SKUAST-Jammu)

