India's 17 moonshots leveraging Sustainable Development Goals

(A unique and world beating path to 10% growth and a $10 trillion economy)

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India's most penetrating reforms: JAM trinity, digital India, widespread availability of cooking gas, the New Education Policy, the changes in company law, tax, IBC, real estate regulations, Benami Act, the social security codes and above all the agricultural reforms are all in the direction of fundamentally setting up India for gestalt growth. People have confidence even after the most severe lockdown on the planet to rise and conquer! The corona crisis and its handling with a calm and confident hand delivering UBI and UBS to the weakest parts of the population are indeed heartening. The stage is set for India to rise and become the fastest growing nation on earth!

The most alluring framework for budget making awaits immediate implementation by FM Nirmalaji. Our framework, which if replicated by the 193 signatories to the UN SDGs can change our world riding on **E**nvironmental stewardship, **S**ocial responsibility and great **G**overnance. The 17 SDGs can combine beautifully to create 17 moonshots in 193 nations and take our planet into a new orbit. Here is the framework:

Sustainable Development Goals

17 Goals

169 Targets*

231 Indicators*

193 Member States

2015 – 2030 Timeframe

$ 88 - $100 Trillion Annual global GDP
(which can be expended positively)

0 – 100 Scoring scale (UNSDSN**)

Sweden ranks 1st with a score of **85**

India ranks 117th with a score of **61.92**

* India today measures and reports SDGs across 54 targets and 100 indicators
** UNSDSN : UN Sustainable Development Solutions Network

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

SUSTAINABLE DEVELOPMENT GOALS

"India's success in achieving SDG can change the face of the world "– UNGA President, Maria Fernanda Espinosa
Sep 2018, 73rd UNGA

India must target to be in top 50 global SDG ranking by 2024
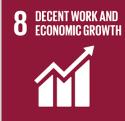
"Over the years the momentum has built and India has moved massive resources to the rural areas, transformed water and sanitation like no other nation on earth, announced path breaking education, agriculture and labour reforms and has taken major steps to make cheating the financial system costly"

All this needs to now be brought together in the next Union Budget through
Targeted Interventions

Alignment of Objectives and Key themes

Union Budget Objectives

Key SDG themes

- Reduce poverty and unemployment

Matched objectives

- End poverty

- Reduce inequalities
- Reduce regional differences
- Reallocate resources

Matched objectives

- Leave no one behind
- Peace & prosperity for all

- Economic stability
- Economic growth
- Manage public enterprise

- Develop sustainably
- Protect planet

Feed and sustain each other

Align National Budget to SDGs – Why?

- Brings together the holistic picture of nation's priorities, plans, funding, execution and outcome measurement under one system of governance

- An opportunity to balance development and sustainability by placing them within the same framework

- Success of one fully depends on the delivery of other – Must sustain each other to prosper

Goals

Goals of an SDG aligned budget, a summarised reflection of targeted achievements across national SDG Indicators

1 **Universal basic income and services available to ALL by 2023**

2 **India's SDG ranking to 50 from 117 by 2024**

3 **$10 Trillion economy by 2027**

Sustainable Development towards a $10Trillion economy | How?

- Maximise 'Decent work and Economic Growth' (SDG 8) to deliver 14 other SDGs through Cause and effect Model – SDG8ChainAction

- Achieve SDG8ChainAction through

Targeted Interventions

ACROSS

- Strategy
- Business Models
- Technology
- Policies
- Governance

Goals
of an SDG aligned budget, a summarised reflection of targeted achievements across national SDG Indicators

This same framework can be cascaded down to states, city municipal corporations, communities, corporates and individuals

SDG8ChainAction : Maximizing SDG 8 to deliver 14 other SDGs through cause and effect

- Invest funds primarily on Group 1 SDGs with an intent to create jobs and lift SDG 8, *Decent work and economic growth.*

- Specific opportunities / projects in each SDG area are to be devised with an intent to deliver the above strategy

- One set of Group 1 SDGs to create quick returns in terms of jobs and a significant boost to SDG 8 while the others need to be delivered to meet their respective long-term goals. The spend proportion across SDGs to maintain the equilibrium as needed

- Group 1 will deliver SDG 8 which in turn will trigger progress on Group 2 SDGs directly or indirectly

- Mock-test the strategy using available data models

- The SDG targets and strategy are to be devised keeping in mind the technology leverage, plan, risks, traceability and measurement indices

Targeted Interventions ACROSS

- **S**trategy
- **B**usiness Models
- **T**echnology
- **G**overnance
- **P**olicies

Goals
of an SDG aligned budget, a summarised reflection of targeted achievements across national SDG Indicators

?

Targeted Interventions across Strategy, Business Models, Technology, Governance and Policy to deliver the **Budget Goals**

STRATEGY

- Empower States – Activate cooperative federalism
- Embrace globalisation and free markets
- Set Central Government's primary focus on governance

BUSINESS MODEL

- Convert undertakings to corporates
- Embrace PPP
- Enable Investment based on SDG implementation effectiveness
- Open up health & education to private and global investments

TECHNOLOGY

Unleash power of technology to deliver Targeted Interventions
- AL/ML
- AR/VR
- Big Data Analytics
- IoT
- Chip Manufacturing
- Electric & Autonomous Mobility
- Vertical Agriculture
- 3D Printing
- Biotechnology
- Wi-fi for all
- Significantly Renewables (90% in 6 years)

GOVERNANCE

- Devise and establish global best practice governance across all walks of society, particularly to achieve the Goals, Strategy and Business Models
- Diversify boards in every way
- Extreme simplification
- Discard all non productive activities

POLICY

- As required to enable the Goals, Strategy, Business Models, Technology and Governance
- Extremely Efficient Judiciary to support – Every judgement within 6 months
- Instant payment of all government dues

S   B   T   G   P

Targeted Interventions Across Strategy, Business Models, Technology, Governance and Policy to deliver the **Budget Goals**

STRATEGY	BUSINESS MODEL	TECHNOLOGY	GOVERNANCE	POLICY
▪ Empower States – Activate cooperative federalism ▪ Embrace globalisation and free markets ▪ Set CG's primary focus on governance	▪ Convert undertakings to corporates ▪ Embrace PPP ▪ Enable Investment based on SDG implementation effectiveness ▪ Open up health & education to private and global investments	Unleash power of technology to deliver Targeted Interventions ▪ AL/ML ▪ AR/VR ▪ Big Data Analytics ▪ IoT ▪ Chip Manufacturing ▪ Electric & Autonomous Mobility ▪ Vertical Agriculture ▪ 3D Printing ▪ Biotechnology ▪ Wi-fi for all ▪ Significantly Renewables (90% in 6 years)	▪ Devise and establish global best practice governance across all walks of society, particularly to achieve the Goals, Strategy and Business Models ▪ Diversify boards in every way ▪ Extreme simplification ▪ Discard all non productive activities	▪ As required to enable the Goals, Strategy, Business Models, Technology and Governance ▪ Extremely Efficient Judiciary to support – Every judgement within 6 months, Instant Payment of dues
S	B	T	G	P

Example ?

"India's 17 moonshots"
Transformational Solutions for a Transformed World!

1

Focus on the most disadvantaged by making universal basic income and services available to ALL

- Per capita rural GDP income to rise to $5000

Top Priority

2

Find and feed every hungry Indian

- Aim to ensure every grain is consumed or stored safely
- Food stocks grow in value and respect by consumption, not in poor storage

3

Empower every woman

- Employ entire willing woman population by filling up every vacancy in every government and private enterprise
- Ensure each one has a smart phone with a self learning application to enhance skills required

4

Make all last mile irrigation deliver water

- Ensure completion of all incomplete irrigation projects in the next 6 months in a mission mode
- Implement strict sanitation laws universally
- A tap for every home and clean water from every tap

5   **3-D print 10 million homes** – Safe homes for all

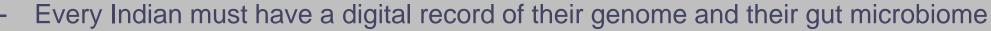**6**   **Dramatically reduce inequalities through Implementation of the 4 social security codes**
- Every state government to implement the four social security codes, on **Wages**, **Social Security**, **Industrial Relations** and **Occupational Safety and Health**
- The middleclass will double in 6 months to 500 million people

7   **Health Care: Digitize | Telemedicine | Vaccination | Home care**
- Every Indian must have a digital record of their genome and their gut microbiome
- Digitise all health and medicine ingesting history so that diagnosis and medical specification are done on a personalised basis using telemedicine.
- Move sick care to health care through vaccination
- Immunity enhancement through plant extracts
- Personal hygiene and yoga encouragement at scale
- Telemedicine infrastructure to ensure home care at scale.

8

Quadruple farmer income | Agri-preneurial revolution in food and grain trade | Enable remigration to villages

- Multi Cropping, Pulse Growing, Seed Multiplication & Vertical Agriculture
- Technology enabled agriculture : AI based pesticide delivery, mechanical harvesting, robotic bailing, autonomous tractor, ATVs
- Establish cold chains
- 5 fold increase in micro finance, two wheeler dealerships

9

Education : Implement NEP | Open up | 100% net enrolment ratio

- Ensure universal adoption of National Education Policy
- Open up education to private and global investments
- Learning & teaching to be brought to every Indian from the best source in the world
- Achieve 100% net enrolment ratio in elementary and secondary education through phygital schools in two years

10

Pivot power to 90% Renewable Energy

- Accelerate the journey by decentralizing and democratized pricing
- Preferential tariffs for low level consumptions. All other subsidies must go
- All power consumption to be metered honestly
- Average price to go down drastically

11 Deliver decent work for all by bringing accountability to center stage
- No permanent tenure to all PSU and GOI employees
- A life long learning, continuous improvement and reskilling for relevance must be a continuous automated effort
- Zero employment exchange pendency

12 Massive industry innovation and technology adoption for 10X productivity
- A million 4.0 factories making world class flawless products
- Transform manufacturing to Additive from Subtractive
- Robotise and autonomise moving parts
- Massively scale up the use of AR-VR
- 3D printed meat
- Materials embedded in zombie smokestack plants must be retrieved and redirected to any sector as a source of material for 3-D printing led manufacturing

13 Digital infrastructure for ALL
- Make swift and cheap WiFi available at very low latency for all
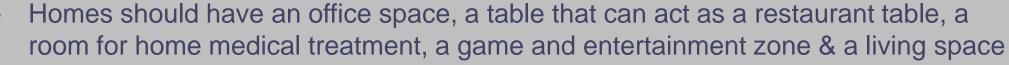- A connected internet devise for every Indian, uninterrupted & at affordable cost

14 Make all rural and urban interventions climate resilient
- Agricultural production independent of monsoon by 2022

15

Reimagine all spaces, Reignite real estate!
- Seamlessly blend multi use, proportionate ownership and sharing economy ideas
- Homes should have an office space, a table that can act as a restaurant table, a room for home medical treatment, a game and entertainment zone & a living space
- Same goes for all factories with added space for R&D
- Almost every mall, post office or other space to multitask as educational, health care, entertainment, training and other engagement space

16

Taxation : Extreme simplification | 35% tax to GDP ratio
- Simplify personal income tax
- Make tax filing as unnecessary as we pivot to tax determination
- Ultra-simplification of GST via no exemptions and no composition
- 3 Rates for entire economic activity : 0,10,15
- Uniform laws for all states
- Encourage external trade by pivoting to a simplified and low import duty regime
- Zero litigation - All unutilized past incentives to be permitted as set off
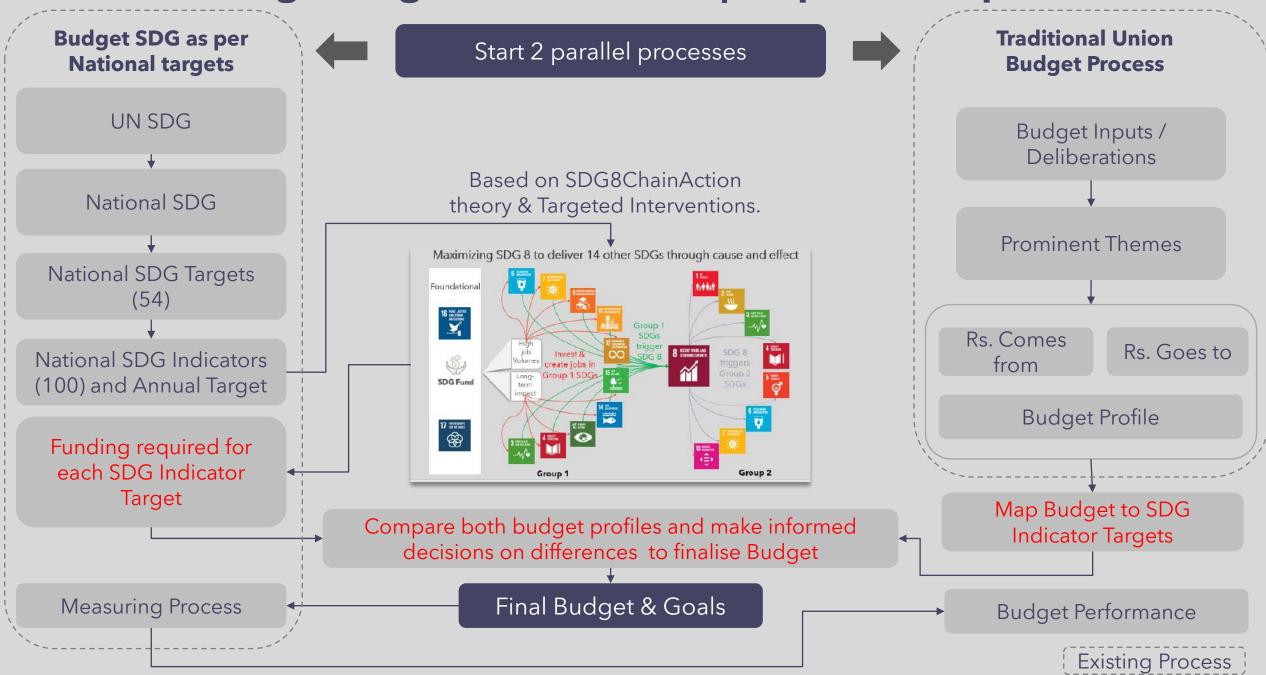
17

Extremely efficient judiciary:
- E-courts | Robo judges | Algorithm driven decisions | Speech to text enablement
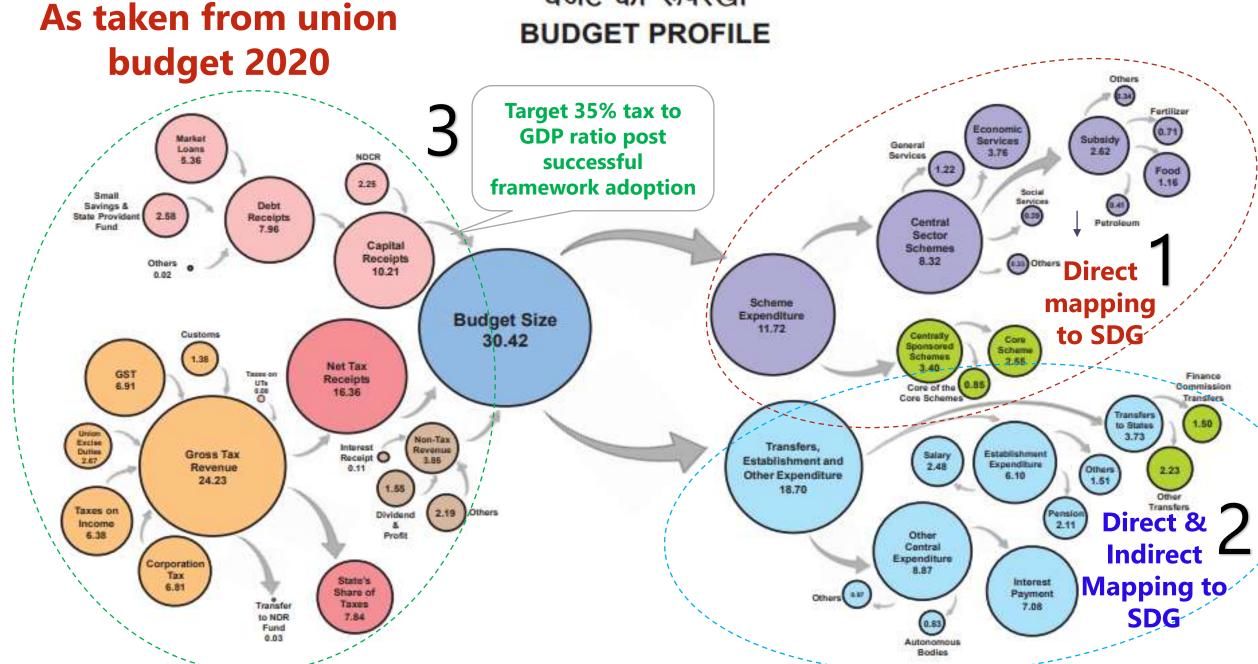- No pendency beyond 6 months

Aligning National Budget to SDG – A quick and contextual solution for 2021

Budget alignment to SDG | A quick adoption

Budget SDG as per National targets

Start 2 parallel processes

Traditional Union Budget Process

UN SDG

National SDG

National SDG Targets (54)

National SDG Indicators (100) and Annual Target

Funding required for each SDG Indicator Target

Based on SDG8ChainAction theory & Targeted Interventions.

Maximizing SDG 8 to deliver 14 other SDGs through cause and effect

Budget Inputs / Deliberations

Prominent Themes

Rs. Comes from

Rs. Goes to

Budget Profile

Map Budget to SDG Indicator Targets

Compare both budget profiles and make informed decisions on differences to finalise Budget

Final Budget & Goals

Measuring Process

Budget Performance

Existing Process

Budget alignment to SDG | A quick adoption

- Leverage existing Union Budget process and national SDG budgeting & measurement processes with minimal modifications / extensions to achieve SDG based budgeting in 2021

- Ministry of Statistics and Program Implementation (MOSPI) today supports tracking and measurement of SDGs across 54 SDG Targets and 100 SDG Indicators.

- Budget each SDG (with traceability to SDG Targets and Indicators) by applying the SDG8ChainAction theory and Targeted Interventions explained earlier. This will result in one version of national budget, say SDG Budget 1

- Map draft Union Budget Profile of 2021 to respective SDG indicators and corresponding budget allocated. This forms SDG Budget2 – *Refer next slide for potential mapping*

- Compare SDG Budget 1 and 2, make informed decisions on the differences and finalize SDG Based Union Budget 2021 along with SDG Based Budget Goals. The Goals are a summarized reflection of SDG indicators

- SDGs to be measured across SDG Indicators following the current MOSPI processes. The measurements in turn reflect Budget Performance and Goal Delivery

- The process can be made more efficient and optimized in the subsequent years

As taken from union budget 2020

बजट की रूपरेखा
BUDGET PROFILE

3

Target 35% tax to GDP ratio post successful framework adoption

1 **Direct mapping to SDG**

2 **Direct & Indirect Mapping to SDG**

An analysis of 2021 union budget suggests that budget heads are directly or indirectly mappable to SDGs

Budget to SDG Indicators mapping | An illustration

Budget Head From	Budget Item	SDGs Impacted	National SDG Target*	National SDG Indicators*
Union Budget 2020	**National Rural Drinking Water Programme:** Aims to provide safe and adequate water for drinking, cooking and other domestic needs to every rural person on a sustainable basis.	**6 CLEAN WATER AND SANITATION**	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Percentage of Population getting safe and adequate drinking water within premises through Pipe Water Supply (PWS)
				6.1.2 Percentage of population using an improved drinking water source (Rural)
			6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of households having access to toilet facility (Urban & Rural), (in percentage), (similar to 1.4.7)
				6.2.2 Percentage of Districts achieving Open Defecation Free (ODF) target
				6.2.3 Proportion of schools with separate toilet facility for girls (in percentage)
Recommend-ations from this Framework	**Moonshot 5 : 3-D print 10 million homes** – Safe homes for all	**1 NO POVERTY**	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.4 Proportion of homeless population to total population (in percentage)
		11 SUSTAINABLE CITIES AND COMMUNITIES	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1 Proportion of Urban Population Living in Slums, informal Settlements or Inadequate Housing

Implementing the Framework

Technology enabled virtuous cycle reinforced through feedback loop

Framework Implementation leveraging digital technology | AL/ML/DL | Predictive Models | Bigdata | Blockchain

- **Statistical Predictive Modelling** Best outcome prediction for SDG8ChainAction

- **AI/ML/DL based intelligence and self learning** - Mapping and impact : SDG interconnects, SDG to Budget | Learn from outcome and improve prediction model

- **Integrate with complex national systems** – MOSPI, Other Ministries, State, City, Corporates

- **Bigdata Analytics** – Measure & Analyse performance | Integrated Reporting

01 Plan
- Strategy, Business Models, Technology, Governance and Policies
- Budget, Priorities, Targets

02 Set Up
- Mapping & Impact
- Predictive Models

03 Execute
- Finalize budget and Moonshots
- Apply Models
- Invoke cascading to states, cities, corporates and individuals
- Execute, Enable & Monitor

04 Measure, Report & Improve
- Measure SDG Indicators and Budget Performance
- Compare with prediction models
- Integrated Reporting
- Feedback loop

Putting it all together – The big picture
National Integrated Report

National Integrated Report | An illustrative view

Input
6 Capitals

Natural
Water | Air
Environment | Living things

Human
Citizens | Workforce

Finance
Net Tax Receipts
Capital Receipts
Non Tax Revenue

Manufactured
Goods | Infrastructure
Technology

Social & Relationship
Community, Rest of the world,
International Organizations :
UN/WHO/OECD

Intellectual
Patents | Research

Process
Goals

1. Universal basic income and services available to ALL by 2023
2. India's SDG ranking to 50 from 117 by 2024
3. $10 Trillion economy by 2027

Perform activities invoking SDG8ChainAction

- 8 Economic Growth & Stability
- 1 Defense | Law & Order
- 2 Public Goods & Services
- 3 Industrial Production
- 4 Infrastructure Development
- 5 Environment & Climate action
- 6 Bilateral Trade | Macro economics
- 7 Taxation / budgeting

Targeted Interventions across

Strategy | Business Models | Technology | Governance | Policy

Output
100 National SDG Indicators across 6 capitals

Natural
Environmental Performance Index

Human
Human Capital Index

Finance
GDP
Per Capita

Manufactured
GDP | Exports | Imports

Social & Relationship
Ease of living | Bilateral relationships

Intellectual
Intellectual Capital Index

Outcome
National SDG Composite and individual indexes

- 500 Mil middleclass Monsoon independent agriculture
- 100% net school enrolment ratio — 2023
- 2024 — Zero emp exchange pendency 10X industrial production
- Quadruple farmer income Per capita $5000 — 2025
- 2026 — 35% tax to GDP ratio
- 90% renewable energy — 2027
- 2028 — $10 trillion economy

Cascade framework, targets & reporting down to states, cities, communities, corporates and individuals and sum performance measure upwards

References

https://niti.gov.in

http://www.mospi.gov.in/

https://www.undp.org/

https://www.sdgindex.org/

Icons made by photo3idea_studio from <a
href="https://www.flaticon.com/" title="Flaticon"> www.flaticon.com