



# 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 1<sup>st</sup> with a score of 85

India ranks 117<sup>th</sup> with a score of 61.92

\* India today measures and reports SDGs across 54 targets and 100 indicators

\*\* UNSDSN : UN Sustainable Development Solutions Network



**“India’s success in achieving SDG can change the face of the world” – UNGA President, Maria Fernanda Espinosa**

Sep 2018, 73<sup>rd</sup> 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

- Reduce poverty and unemployment

- Reduce inequalities
- Reduce regional differences
- Reallocate resources

- Economic stability
- Economic growth
- Manage public enterprise

Matched  
objectives

Matched  
objectives



## Key SDG themes

- End poverty

- Leave no one behind
- Peace & prosperity for all

- 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**

A  
C  
R  
O  
S  
S

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

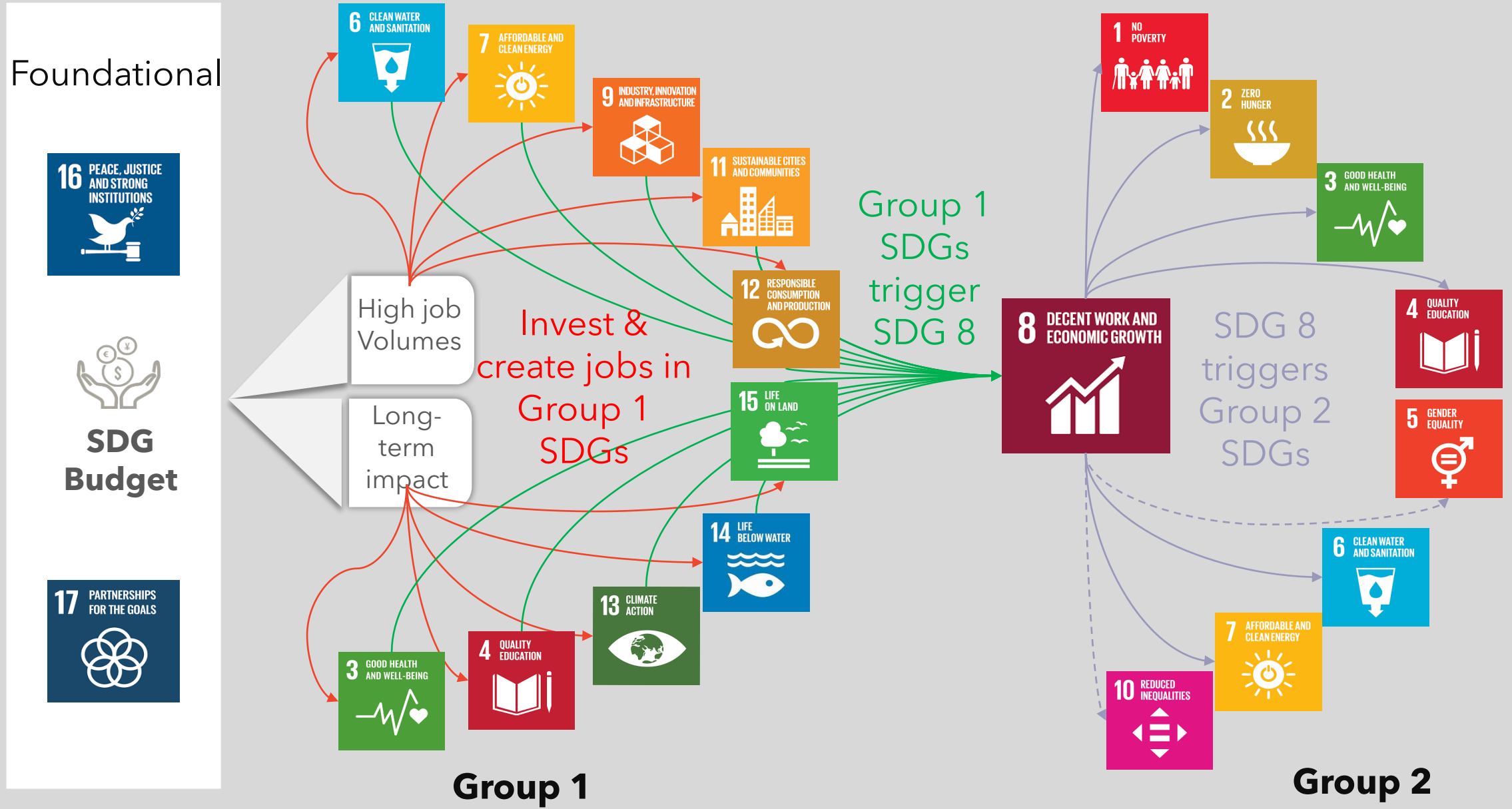
**Goals**

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



# **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

A  
C  
R  
O  
S  
S

- Strategy
- Business Models
- Technology
- Governance
- Policies



## 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

S

## BUSINESS MODEL

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

B

## 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)

T

## 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

G

## 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

P



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

| STRATEGY   | BUSINESS MODEL   | TECHNOLOGY   | GOVERNANCE  | POLICY   |
|--|--|--|---|--|
| <ul style="list-style-type: none"> <li>Empower States – Activate cooperative federalism</li> <li>Embrace globalisation and free markets</li> <li>Set CG's primary focus on governance</li> </ul> | <ul style="list-style-type: none"> <li>Convert undertakings to corporates</li> <li>Embrace PPP</li> <li>Enable Investment based on SDG implementation effectiveness</li> <li>Open up health &amp; education to private and global investments</li> </ul> | <p>Unleash power of technology to deliver Targeted Interventions</p> <ul style="list-style-type: none"> <li>AL/ML</li> <li>AR/VR</li> <li>Big Data Analytics</li> <li>IoT</li> <li>Chip Manufacturing</li> <li>Electric &amp; Autonomous Mobility</li> <li>Vertical Agriculture</li> <li>3D Printing</li> <li>Biotechnology</li> <li>Wi-fi for all</li> <li>Significantly Renewables (90% in 6 years)</li> </ul> | <ul style="list-style-type: none"> <li>Devise and establish global best practice governance across all walks of society, particularly to achieve the Goals, Strategy and Business Models</li> <li>Diversify boards in every way</li> <li>Extreme simplification</li> <li>Discard all non productive activities</li> </ul> | <ul style="list-style-type: none"> <li>As required to enable the Goals, Strategy, Business Models, Technology and Governance</li> <li>Extremely Efficient Judiciary to support – Every judgement within 6 months, Instant Payment of dues</li> </ul> |
| 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



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**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.



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## 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 baling, autonomous tractor, ATVs
- Establish cold chains
- 5 fold increase in micro finance, two wheeler dealerships



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## 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



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## 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 device for every Indian, uninterrupted & at affordable cost



## 14 Make all rural and urban interventions climate resilient

- Agricultural production independent of monsoon by 2022



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## 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



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## 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



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## 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

Start 2 parallel processes

**Budget SDG as per National targets**

**Traditional Union Budget Process**

UN SDG

Budget Inputs /  
Deliberations

National SDG

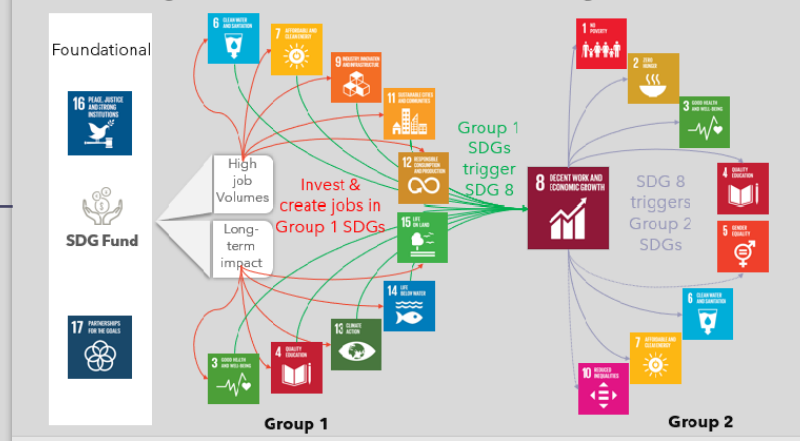
Prominent Themes

National SDG Targets  
(54)

National SDG Indicators  
(100) and Annual Target

Based on SDG8ChainAction  
theory & Targeted Interventions.

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



Funding required for  
each SDG Indicator  
Target

Rs. Comes  
from

Rs. Goes to

Budget Profile

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

Map Budget to SDG  
Indicator Targets

Measuring Process

**Final Budget & Goals**

Budget Performance

Existing Process

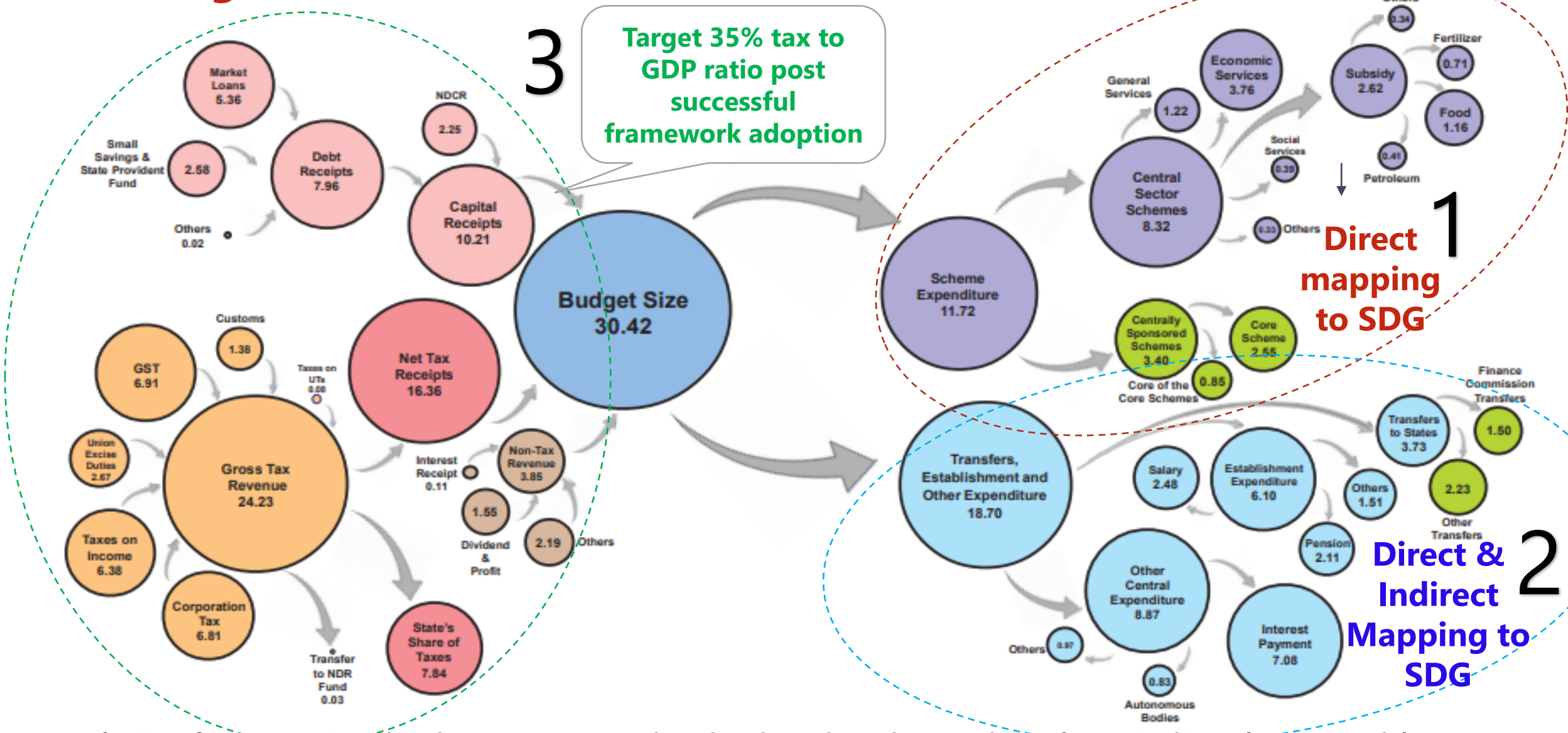


# Budget alignment to SDG | A quick adoption

- 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



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

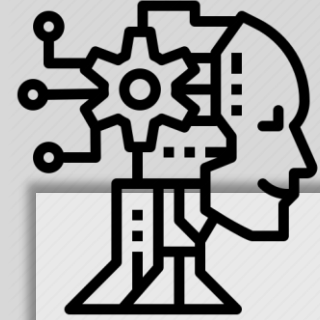
# Budget to SDG Indicators mapping | An illustration

| Budget Head From                           | Budget Item  | SDGs Impacted  | National SDG Target*  | National SDG Indicators*  |
|--|--|--|---|---|
| <b>Union Budget 2020</b>                   | <b>National Rural Drinking Water Programme:</b> Aims to provide safe and adequate water for drinking, cooking and other domestic needs to every rural person on a sustainable basis. |   | 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) |
|  |  |  | 6.2 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   | 6.1.2 Percentage of population using an improved drinking water source (Rural)  |
|  |  |  | 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)   |   |
| <b>Recommendations from this Framework</b> | <b>Moonshot 5 : 3-D print 10 million homes</b> – Safe homes for all  |  | 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)   |
|  |  |  |    | 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums       |

# **Implementing the Framework**

**Technology enabled virtuous cycle  
reinforced through feedback loop**

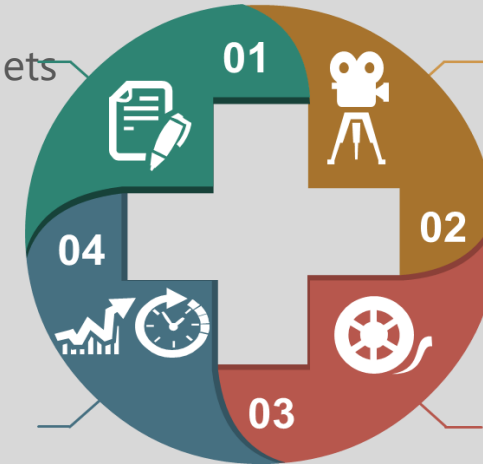
# Framework Implementation leveraging digital technology | AI/ML/DL | Predictive Models | Bigdata | Blockchain



- **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

## 04 Measure, Report & Improve

- Measure SDG Indicators and Budget Performance
- Compare with prediction models
- Integrated Reporting
- Feedback loop

## 03 Execute

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

**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**



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

## References

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