



## ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

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<b>Preparedness of Nepal for Monitoring Sustainable Development Goals: Food Security &amp; Agriculture Perspective</b>

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## Asia and Pacific Commission on Agricultural Statistics Twenty-sixth Session Thimphu, Bhutan, 15-19 February 2016

**Preparedness of Nepal for Monitoring  
Sustainable Development Goals:  
Food Security & Agriculture Perspective**

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## Presentation outline

- A snapshot of MDG Targets and Achievements of Nepal
- Introduction to SDGs
- Preparedness of Nepal to monitor SDGs related **Food Security and sustainable Agriculture production**
- Main Data Sources of Agriculture Statistics in Nepal
- Monitoring & Evaluation guidelines-NPC
- Data Gaps and Capacity gaps
- Issues and Challenges for producing Indicators

3

## A snapshots of MDG Targets and Achievements of Nepal

MDGs and Targets	Status (2015)
<b>MDG 1: Eradicate Extreme Poverty &amp; Hunger</b>	
Between 1990 and 2015, half the proportion of people whose income is less than one dollar a day	On-track
Between 1990 and 2015 half the proportion of hungry people	On-track
<b>MDG 2: Achieve Universal Primary Education</b>	
Ensure that children everywhere, boys and girls alike, will complete their primary schooling by 2015	On-track
<b>MDG 3: Promote gender Equality and Empower Women</b>	
Eliminate gender disparity in primary and secondary education preferably by 2005 & in all levels of education by no later than 2015	On-track
<b>MDG 4: Reduce Child Mortality</b>	
Reduce under five mortality rate by two-thirds between 1990 and 2015	Achieved
<b>MDG 5: Improve maternal Health</b>	
Reduce maternal mortality by three-quarters between 1990 & 2015	On-track
Achieve , by 2015 universal access to reproduction health	Moderately on-track

4

## A snapshots of MDG Targets and Achievements of Nepal(contd.)

MDGs and Targets	Status (2015)
<b>MDG 6: Combat HIV/AIDS, Malaria &amp; other Diseases</b>	
Have halted by 2015 & begun to reverse the spread of HIV and AIDS	On-track as trend reversal in HIV prevalence has been achieved
Achieve, by 2010, universal access to treatment for HIV and AIDS for all those who need it	Off-track
Have halted by 2015 & begun to reverse the incidence of malaria & other major disease	On-track as trend reversal in CMI, API, TB prevalence rate and death rate associated with malaria and TB have been achieved
<b>Goal 7: Ensure Environmental Sustainability</b>	
Integrate the principles of sustainable development into country policies & programs & reverse the loss of environmental resources	Moderately on-track
Reduce biodiversity loss, achieving a significant reduction in the rate of loss by 2010	Moderately on-track
Halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	Achieved for drinking water and moderately on-track for sanitation
To have achieved a significant improvement in the lives of slum dwellers by 2020	Adequate data not available to see trend
<b>MDG 8: Develop a Global partnership for Development</b>	
Develop a global partnership for Development	Adequate data not available to see trend

## Introduction to SDGs

- **SDGs** were first **formally discussed** at the UN Conference on Sustainable Development held **in Rio de Janeiro in June 2012**
- The **objective** of the conference was **to produce a set of universally applicable goals** that balance the three dimensions of sustainable development: environmental, social, and economic issues
- UN General Assembly **Open Working Group** on SDGs forwarded a proposal for the SDGs and **prepared** the set of **17 goals and 169 targets** with consultations of different stakeholders at various places
- At the **United Nations Sustainable Development Summit** on **25 September 2015**, world leaders **adopted the 2030 Agenda** for Sustainable Development that consists of **17 goals and 169 targets** to be **attained by 2030**

## Nepal: SDGs Progress Monitoring

- **National Planning Commission(NPC) of Nepal is leading to workout an implementation strategy by engaging line ministries, external development partners and other stakeholders**
- For monitoring the outputs and outcomes, NPC developed(draft) a framework of proposed Targets with Indicators of different Goals
- The following are the **Targets with proposed indicators** on the basis of which we can actually **monitor the progress on food security and sustainable Agriculture production(SDG2 related)**.

7

## Nepal: SDGs Progress Monitoring

**SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture**

Target & Indicators	2014	2020	2025	2030	Data Source	Frequency	Responsible Agency
<b>Target 2.1 End hunger by 2030 &amp; ensure access by all people safe, nutritious &amp; sufficient food for all year round</b>							
2.1a Households with inadequate food consumption(%)	36.1 <sup>a</sup>	22.94	11.97	1	NSCA/NLSS/AR	10years/5years/Yearly	CBS/CBS/MoAD
2.1b Population spending more than two-thirds of total consumption on food(%)	20 <sup>b</sup>	12.88	6.94	1	NLSS	5 Years	CBS
2.1c Per capita food grain production(kg)	341 <sup>c</sup>	404	457	510	ES/AR	1or2 Years	MoF/MoAD

NSCA-National Sample Census of Agriculture; NLSS-Nepal Living Standards Survey; AR- Annual Report; ES-Economic Survey;

CBS-Central Bureau of Statistics; MoAD-Ministry of Agriculture Development; MoF- Ministry of Finance;

<sup>a</sup>MoF, Economic Survey 2011; <sup>b</sup>CBS, NLSS 2011; <sup>c</sup>MoF, Economic Survey 2015;

8

## Nepal: SDGs Progress Monitoring

### SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture(contd.)

Target & Indicators	2014	2020	2025	2030	Data Source	Frequency	Responsible Agency
<b>Target 2.2 By 2030, end all forms of malnutrition</b>							
2.2a Prevalence of underweight children<5 years(%)	30.1 <sup>d</sup>	19.19	10.9	1	MICS/NLSS	3 years/5 years	CBS/CBS
2.2b Prevalence of stunted children<5 years(%)	37.4 <sup>d</sup>	23.75	12.38	1	MICS/NLSS	3 years/5 years	CBS/CBS
2.2c Prevalence of wasted children<5 years(%)	11.3 <sup>d</sup>	7.44	4.22	1	MICS/NLSS	3 years/5 years	CBS/CBS
2.2d Proportion of Population below minimum level of dietary energy consumption	22.8 <sup>d</sup>	14.63	7.81	1	MICS	3 Years	CBS
2.2e Prevalence of anaemia among women of reproductive age(%)	38.5 <sup>e</sup>	24.44	12.72	1	DHS	5 Years	MoHP
2.2f Prevalence of anamia among children<5 years(%)	46 <sup>e</sup>	29.13	15.06	1	DHS	5 Years	MoHP

DHS-Demographic Health Survey; NLSS-Nepal Living Standards Survey; MICS-Multiple Indicators Cluster Survey

CBS-Central Bureau of Statistics; MoHP-Ministry of Health & Population

<sup>d</sup>CBS, NMICS 2014; <sup>e</sup>MoHP, NDHS, 2011;

9

## Nepal: SDGs Progress Monitoring

### SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture(contd.)

Target & Indicators	2014	2020	2025	2030	Data Source	Frequency	Responsible Agency
<b>Target 2.3 By 2030, double agricultural productivity &amp; the incomes of small-scale food producers</b>							
2.3a Land productivity(mt per ha)	3.6 <sup>c</sup>	4.5	5.3	6	ES/NSCA/AR	1or2Years/10years/Yearly	MoF/CBS/MoAD
2.3b Fertilizer use (kg per ha)	88 <sup>f</sup>	92.5	96.3	100	ES/NSCA/AR	1or2Years/10years/Yearly	MoF/CBS/MoAD
2.3c Access to finance for Agriculture(Agri loan as % of total bank loan)	5 <sup>f</sup>	8.8	11.9	15	ES	1or2years	MoF
2.3d High yield seeds(kg per ha)	2.8 <sup>f</sup>	3.6	4.3	5	ES/OR	1or2years/yearly	MoF/NARC
2.3e Round the year irrigated land in total arable land(%)	40 <sup>f</sup>	55	67.5	80	NSCA/AR	10years/Yearly	CBS/MoAD
2.3f Agriculture Insurance coverage(% of agriculture households)	0.5 <sup>f</sup>	9.7	17.3	25	ES/OR	1or2 Years/yearly	MoF/NRB
2.3g Agriculture households with lands (%)	73.9 <sup>b</sup>	74.3	74.7	75	NSCA/AR	10years/Yearly	CBS/MoAD

NSCA-National Sample Census of Agriculture; AR- Annual Report; ES-Economic Survey; OR-Official Report

CBS-Central Bureau of Statistics; MoAD-Ministry of Agriculture Development; MoF- Ministry of Finance; NRB-Nepal Rastra Bank

NARC- Nepal Agriculture Research Centre; <sup>b</sup>CBS, NLSS 2011; <sup>c</sup>MoF, Economic Survey 2015; <sup>f</sup>MoF, Economic Survey 2013

10

## Nepal: SDGs Progress Monitoring

**SDG 2:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Target & Indicators	2014	2020	2025	2030	Data Source	Frequency	Responsible Agency
<b>Target 2.4 By 2030, ensure sustainable food production system and implement resilient agricultural Practices</b>							
2.4a Agriculture land at the present level(000 hectare)	2641 <sup>f</sup>	2641	2641	2641	ES/NSCA/AR	1or2Years/ 10years/Yearly	MoF/CBS/ MoAD
2.4b Cereal grain (rice)productivity(mt per ha)	3.4 <sup>g</sup>	4.38	5.19	6	NSCA/AR	10years/Yearly	CBS/MoAD
2.4c Soil erosion	–	–	–	–	NSCA/AR	10years/Yearly	CBS/MoAD
2.4d Pesticides uses in Agriculture production	–	–	–	–	NSCA/AR	10years/Yearly	CBS/MoAD
2.4e Bio fertilizer in Agriculture production	–	–	–	–	NSCA/AR	10years/Yearly	CBS/MoAD

NSCA-National Sample Census of Agriculture; AR- Annual Report; ES-Economic Survey;

CBS-Central Bureau of Statistics; MoAD-Ministry of Agriculture Development; MoF- Ministry of Finance

<sup>f</sup>MoF, Economic Survey 2013; <sup>g</sup>Calculated from agricultural data, 2014

11

## Nepal: SDGs Progress Monitoring

**SDG 2:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture

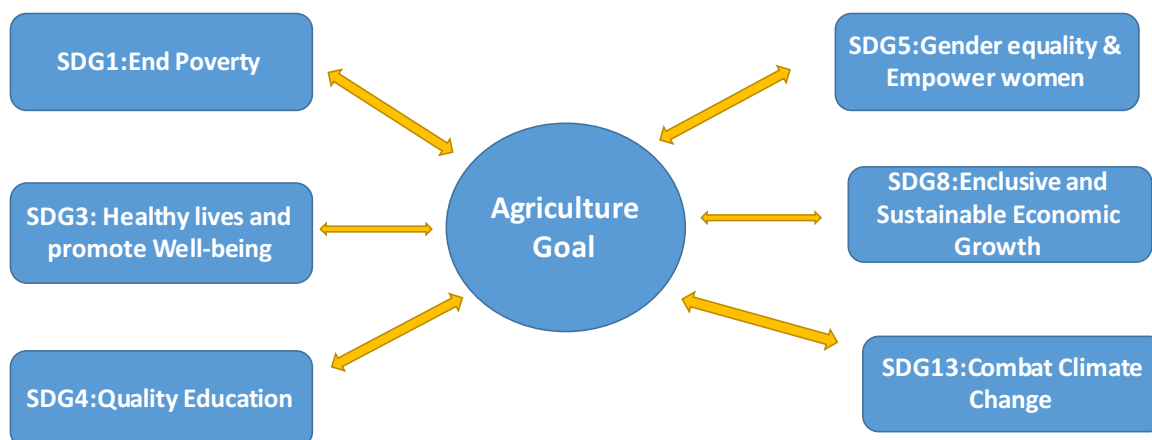
Target & Indicators	2014	2020	2025	2030	Data Source	Frequency	Responsible Agency
<b>Target 2.5 Maintaining by 2020, the genetic diversity of seeds, cultivated plants &amp; farmed &amp; domesticated animals and their related wild species, including through soundly managed &amp; diversified seed and plant banks at the national, regional and international levels.</b>							
2.5a Establish DNA bank for variety of seeds	–	–	–	–	OR	Yearly	NARC
2.5b Establish DNA bank for variety of plants	–	–	–	–	OR	Yearly	NARC
2.5c Establish DNA bank for endagered animal species	–	–	–	–	OR	Yearly	NARC

OR-Official Report; NARC- National Agriculture Research Centre

12

## Nepal: SDGs Progress Monitoring

Achieving the **agriculture goal** is instrumental for achieving several other goals including those concerning absolute **poverty**, education, health, environment, economic growth and inequality.



13

## Nepal: SDGs Progress Monitoring

### Major Data Sources and Responsible Agencies(Agriculture related)

SDGs	Data Source	Responsible agencies	Frequency	Disaggregating level
SDG1: End Poverty	PA/NLSS/AHS/ES	CBS/CBS/CBS/MoF	5 years/yearly/1or2years	National/Regional/District
SDG3: Healthy Lives and Promote Well-being	MICS/DHS/HDUS	CBS/MoHP/MoHA	3 years/5years/None	National/Regional/National
SDG4: Quality Education	NLSS/FR/AR/ES	CBS/MoE/MoE/MoF	5Years/Yearly/Yearly/1or2years	National/Regional/District
SDG5: Gender Equality and Empower Women	MICS/DHS/ES	CBS/MoHP/MoF	3years/5years/1or2years	National/Regional
SDG8: Sustainable Economic Growth	ES/LFS	MoF/CBS	1or2Years/5years	National/Regional
SDG13: Combat Climate Change	EC	CBS	2 years	National/Regional

PA- Poverty Analysis; NLSS- Nepal Living Standards Survey; MICS- Multiple Indicators Cluster Survey; DHS- Demographic Health Survey; FR- Flash Report; AR- Annual Report; ES- Economic Survey; EC- Environmental Compendium of Nepal

### Minimum Required Data Set (MRDS)( [Annex.xls](#))

14

## Nepal: SDGs Progress Monitoring

### Monitoring and Evaluation(M&E) & MRDS

- M & E guidelines and MRDS are for monitoring
  - SDGs
  - SAARC DGs
  - National Development Plans
  - Graduation from LDC to DC by 2022
  - Periodic Plan
- All sectoral Ministries have their own National & Subnational indicators for monitoring their progress
  - Reflection on Yearly Program
  - Allowance provided based on performance/progress indicators

15

## Nepal: SDGs Progress Monitoring

### Data Gaps(Agriculture related):

Different Ministries and line agencies have different mandate to produce statistics as they have own purpose, scope and timing of their work: duplication and conflicting statistics produced

Data Gaps on

- Impact of global warming in agriculture sector
- Seasonal variation on agriculture product
- Data on agriculture vegetation using satellite maps
- Geo-referencing of agriculture data
- Information on environmental consequences of the intensive use of land and agricultural chemicals
- Information on nutritional food, revision of food composition table
- Data on Biodiversity, food consumption pattern at sub national level
- For the proper use of available statistical resources, one has to first identify the data gaps

***Data Gap = Demand - Supply***

16



## Nepal: SDGs Progress Monitoring

### Data Gaps/Duplications: Example

**TARGET 2:** Ensure that children everywhere, boys and girls alike, will complete their primary schooling by 2015

Indicator	1990	2000 <sup>1*</sup>	2005 <sup>2*</sup>	2010 <sup>3*</sup>	2013 <sup>4*</sup>	2015 target
Net enrolment rate in primary education	64.0 <sup>5*</sup>	81.0	84.2	93.7	95.3	100
Proportion of pupils enrolled in grade one that reach grade five	38.0 <sup>6*</sup>	63	79.1	77.9	84.2	100
Literacy rate of 15–24 year olds	49.6 <sup>7*</sup>	70.1 <sup>8*</sup>	79.4 <sup>9*</sup>	86.5 <sup>10*</sup>	88.6 <sup>11*</sup>	100

**Sources:**

<sup>1</sup>Ministry of Education Sports (MoES) (1990–1999).  
<sup>2</sup>MoES (2000).  
<sup>3</sup>MoES (2005).  
<sup>4</sup>MoES (2009–10).  
<sup>5</sup>Ministry of Education (MoE) (2012–13).  
<sup>6</sup>HRPC (2001).  
<sup>7</sup>HRPC (1991).  
<sup>8</sup>HRPC (2002).  
<sup>9</sup>MoHP (2007).  
<sup>10</sup>CBS (2009).  
<sup>11</sup>MoHP (2011).

One indicator different sources

Several indicators no source

**TARGET 1B:** Achieve full and productive employment and decent work for all, including women and youth

Growth rate of GDP per person employed	1990	2000	2005	2010	2013	2015 target
Growth rate of GDP per person employed	n/a	n/a	1.4	1.59	n/a	
Employment to population ratio	n/a	n/a	n/a	81.73 <sup>1*</sup>	82.20 <sup>2*</sup>	
Proportion of employed people living below USD 1 per day	n/a	n/a	n/a	22	n/a	17
Proportion of own account and contributing family workers in total employment	n/a	83.1	n/a	81.9	n/a	

**Sources:**

<sup>1</sup>CBS (2000). (for people aged 15 years and above).  
<sup>2</sup>“Employment” (2011).

## Nepal: SDGs Progress Monitoring

### Capacity Gaps at National & Subnational Levels

#### Statistical Capacity

- CBS-Inadequate number of Statistical Human Resource
- Other agencies
  - ✓ less competent/less in number
  - ✓ No Statistical Units
  - ✓ Statistical Units but no sufficient staff
- Data Producer but not the policy analyzer

#### Methodological Gap

- Master Sampling Frame
- Survey Clearance System
- Use of recommended standards, manual SNA 2008/2013..,
- Hunger/Nutrition: eg prevalence of undernourishment(POU), food insecurity experience scale(FIES)

#### IT Capacity

- CBS- GIS, CAPI, OCR, ICR, Use of Tablets (still insufficient)
- Other agency-poor
- Organizational Structure not IT Friendly

## Nepal: SDGs Progress Monitoring

### Issues & Challenges for producing indicators

- Capacity Develop at National and Subnational levels
- Coordination
- Localization of SDG at Subnational level
- Mainstreaming SDG into Periodic Plan
- Mobilization of financial resources
- Strengthening Governance & Service Delivery
- Post Disaster Recovery & Reconstruction
- Imbalance between demand and supply

***THANK YOU FOR YOUR ATTENTIONS***