

UNDP and IFPRI Seminar

Measuring poverty and food security in Egypt:

Current state and the potential of big data

26 November 2019

UNDP Presentation:

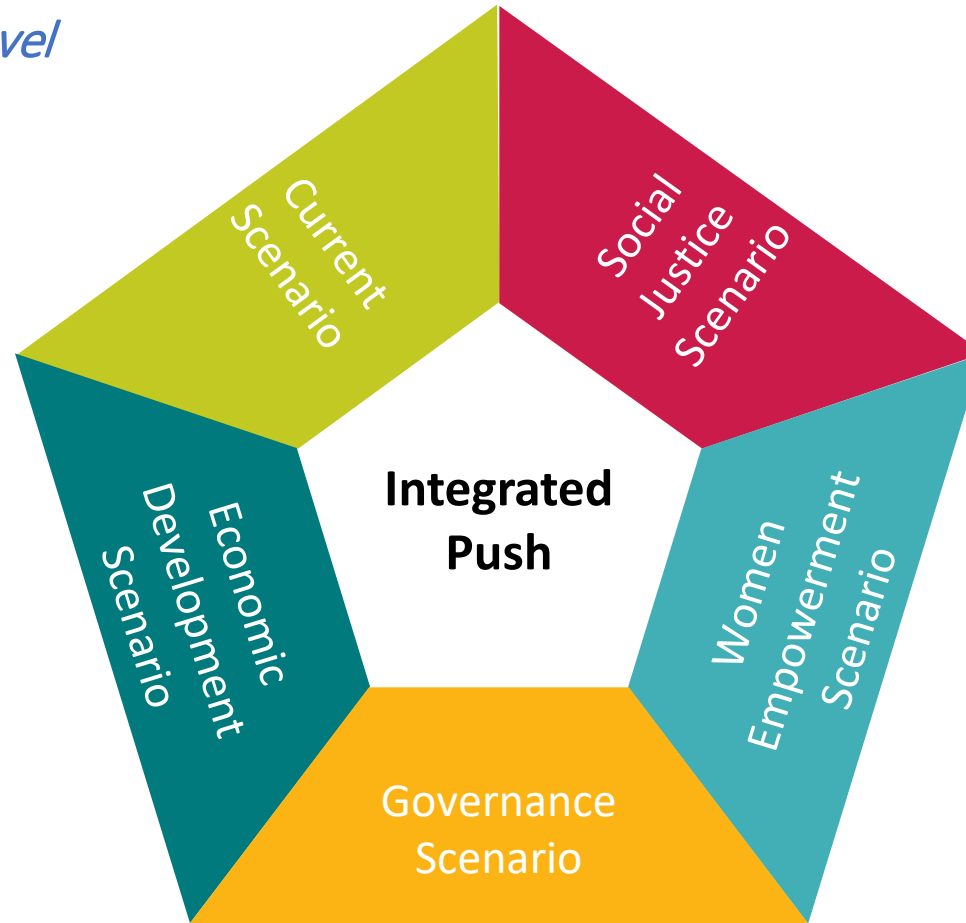
*Lessons learned from comprehensive modelling
and long term forecasting*



*Empowered lives.
Resilient nations.*

ANALYTICAL FINDINGS

Scenarios Set at the Strategic Level



Governance:

- GDP increased by 6% more than current path; by 2050
- GDP 26% greater than current path and GDP/capita is 16% greater ;
- labor productivity doubles from 2030 projected values;
- \$129 billion annual revenues

Social Justice

- Life expectancy grows;
- Notable change in education attainments
- Material mortality decrease
- HDI rank improved to 100 in 2030 from 115 in 2017;

Women Empowerment

- Poverty drops to 11% in 2030
- GDP/capita increase of 7%
- Demographic dividend is 12% larger than current path in 2030 and 30% in 2040



Goal 2: Hunger Target 2.1 Indicator 2.1.1a Egypt

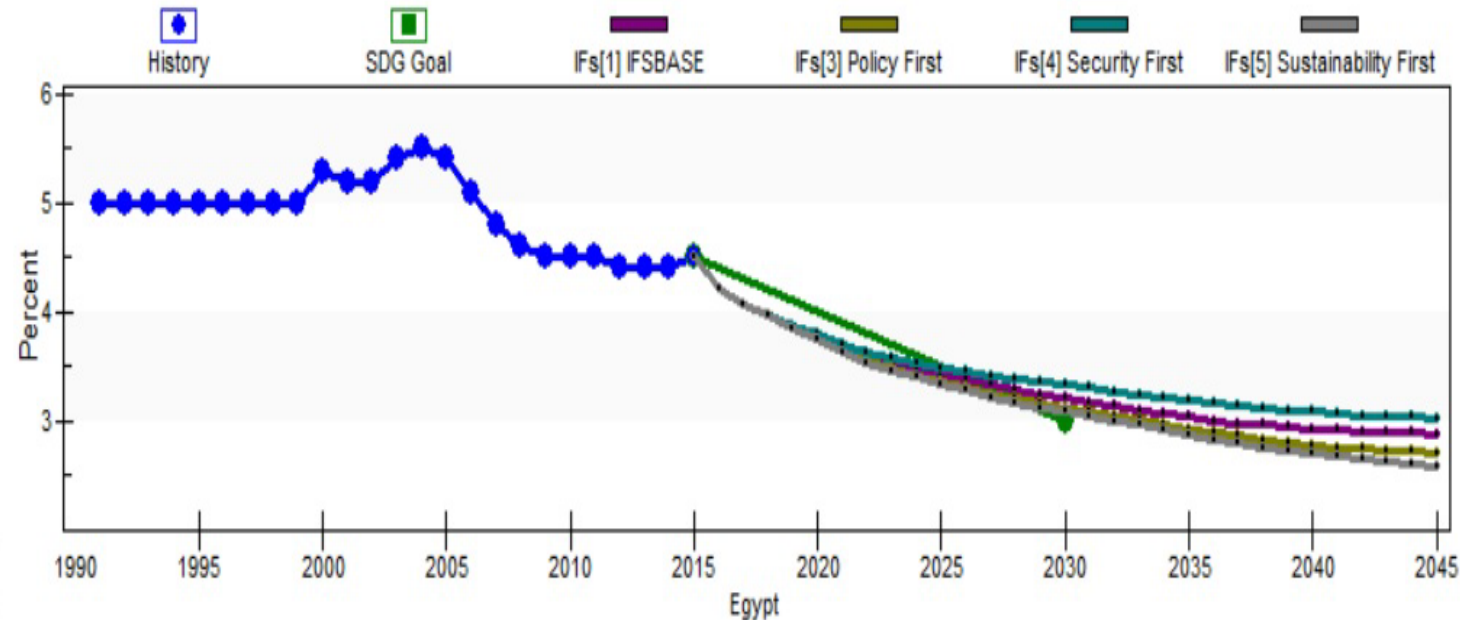
Goal 2: Hunger - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Target 2.1 - By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Indicator 2.1.1a - Percentage of undernourished population

Display

Chart Data



Select multiple scenarios or countries/groups to compare them. Unselect all countries to go back to full-screen display.

- ☐ 2 - Markets First.run
- ☒ 3 - Policy First.run
- ☒ 4 - Security First.run
- ☒ 5 - Sustainability First.run

- ☒ Afghanistan
- ☐ Albania
- ☐ Algeria
- ☐ Angola

a ls.

ronesia

on an ls.

Vanuatu



ANALYTICAL FINDINGS

+ Integrated policies double SDGs target achievements

- Some puzzling blind spots



Empowered lives.
Resilient nations.

SGDs	SDS	Indicator(s) Description	Estimated 2015	Target	Current Path	Economic Development	Social Justice	Governance	Women empowerment	Integrated Push	Current Path	Economic Development	Social Justice	Governance	Women empowerment	Integrated Push
Forecasted values											Deviation From Target					
Goal 1. End poverty in all its forms everywhere																
1	1.2.1.b	Percentage of population below \$3.10 (2011\$ PPP) per day; Lognormal	22.3	11.1	13.7	11.3	11.5	12.3	11	6.1	-23%	-2%	-4%	-11%	1%	45%
	1.1.1.b	Percent of the population living on less than \$1.90 (2011 USD) per day	1.3	0.65	0.7	0.5	0.4	0.5	0.4	0.1	-8%	23%	38%	23%	38%	85%
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture																
2	2.1.1.a	Percentage of undernourished population	4.5	3	3.2	3	3.1	3.1	3.1	2.8	-7%	0%	-3%	-3%	-3%	7%
	2.2.2.a	Percentage of malnutrition (weight for height <-2 SD) among children under 5	7	3	5.9	5.8	5.7	5.8	5.8	5.4	-97%	-93%	-90%	-93%	-93%	-80%
Goal 3. Ensure healthy lives and promote well-being for all at all ages																
3	3.2.2	Infant mortality rate (within first year of birth) in deaths per thousand newborns	17.8	12	11.4	10.9	9.3	11.1	10.9	8.5	5%	9%	23%	8%	9%	29%
	3.7.1	Contraception Use (percent of fertile women)	58.5	97	68.6	69.9	69	69.4	70	72.4	-29%	-28%	-29%	-28%	-28%	-25%
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all																
4	4.1.1.c	Primary education gross completion rate - Total	97.7	97	100	100.5	100.5	100.3	100.5	101.7	3%	4%	4%	3%	4%	5%
	4.1.1.e	Lower secondary education graduation rate - Total	78.8	97	82.2	83.5	85.4	83.1	83.7	88.2	-15%	-14%	-12%	-14%	-14%	-9%
Goal 6. Ensure availability and sustainable management of water and sanitation for all																
6	6.1.1	Percentage of people with access to safe water	98.8	97	99	99	100	99.1	99	100	2%	2%	3%	2%	2%	3%
	6.2.1	Percentage of people with access to sanitation services – Improved	50	97	94.8	94.9	97.6	95	94.9	97.8	-2%	-2%	1%	-2%	-2%	1%
	6.3.1.a	Percentage of people connected to wastewater collection system	44.3	97	45.8	46	49.2	45.9	46.1	50.3	-53%	-53%	-49%	-53%	-52%	-48%
	6.4.2	Freshwater withdrawal as a percentage of available freshwater resources	148.8	74.4	138.5	138.5	138.5	138.6	138.3	138.3	-86%	-86%	-86%	-86%	-86%	-86%
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all																
7	7.1.1	Percentage of population with access to electricity - Total	99.7	97	99.9	99	100	99.1	98.9	100	3%	2%	3%	2%	2%	3%
Percentage of SDG target achieved (from this selection of 13 targets across 6 SDGs)											31%	46%	46%	38%	46%	62%
											Current Path	Economic Development	Social Justice	Governance	Women empowerment	Integrated Push

ANALYTICAL FINDINGS



Empowered lives

SGDs	SDS	Indicator(s) Description	Estimated 2015	Target	Current Path	Economic Development	Social Justice	Governance	Women empowerment	Integrated Push			Current Path	Economic Development	Social Justice	Governance	Women empowerment	Integrated Push
Forecasted values											Deviation From Target							
Goal 1. End poverty in all its forms everywhere																		
1	1.2.1.b	Percentage of population below \$3.10 (2011\$ PPP) per day; Lognormal	22.3	11.1	13.7	11.3	11.5	12.3	11	6.1	-1		-23%	-2%	-4%	-11%	1%	45%
	1.1.1.b	Percent of the population living on less than \$1.90 (2011 USD) per day	1.3	0.65	0.7	0.5	0.4	0.5	0.4	0.1	-1		-8%	23%	38%	23%	38%	85%
	1.a.2a	Percentage of total government spending on essential services (education, health)	18	18.7	18.7	18.6	24	18.7	18.8	22.8	1		0%	-1%	28%	0%	1%	22%
	1.a.1b	Transfers as a percent of GDP	16.9	17.1	17.1	17.2	18.7	17.1	17.3	19.7	1		0%	1%	9%	0%	1%	15%
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture																		
2	2.1.1.a	Percentage of undernourished population	4.5	3	3.2	3	3.1	3.1	3.1	2.8	-1		-7%	0%	-3%	-3%	-3%	7%
	2.2.2.a	Percentage of malnutrition (weight for height <-2 SD) among children under 5	7	3	5.9	5.8	5.7	5.8	5.8	5.4	-1		-97%	-93%	-90%	-93%	-93%	-80%
	2.2.2c	Severe acute malnutrition (weight for height <-3 SD) among children under 5	4.8	1	3	2.8	2.9	2.1	2.6	1.6	-1		-200%	-180%	-190%	-110%	-160%	-60%

ANALYTICAL FINDINGS



Empowered lives.
Resilient nations.

SGDs	SDS	Indicator(s) Description	Estimated 2015	Target	Current Path	Economic Development	Social Justice	Governance	Women empowerment	Integrated Push
Forecasted values										
Goal 1. End poverty in all its forms everywhere										
1	1.2.1.b	Percentage of population below \$3.10 (2011\$ PPP) per day; Lognormal	22.3	11.1	13.7	11.3	11.5	12.3	11	6.1
	1.1.1.b	Percent of the population living on less than \$1.90 (2011 USD) per day	1.3	0.65	0.7	0.5	0.4	0.5	0.4	0.1
	1.a.2a	Percentage of total government spending on essential services (education, health)	18	18.7	18.7	18.6	24	18.7	18.8	22.8
	1.a.1b	Transfers as a percent of GDP	16.9	17.1	17.1	17.2	18.7	17.1	17.3	19.7
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture										
2	2.1.1.a	Percentage of undernourished population	4.5	3	3.2	3	3.1	3.1	3.1	2.8
	2.2.2.a	Percentage of malnutrition (weight for height <-2 SD) among children under 5	7	3	5.9	5.8	5.7	5.8	5.8	5.4
	2.2.2c	Severe acute malnutrition (weight for height <-3 SD) among children under 5	4.8	1	3	2.8	2.9	2.1	2.6	1.6

ANALYTICAL FINDINGS

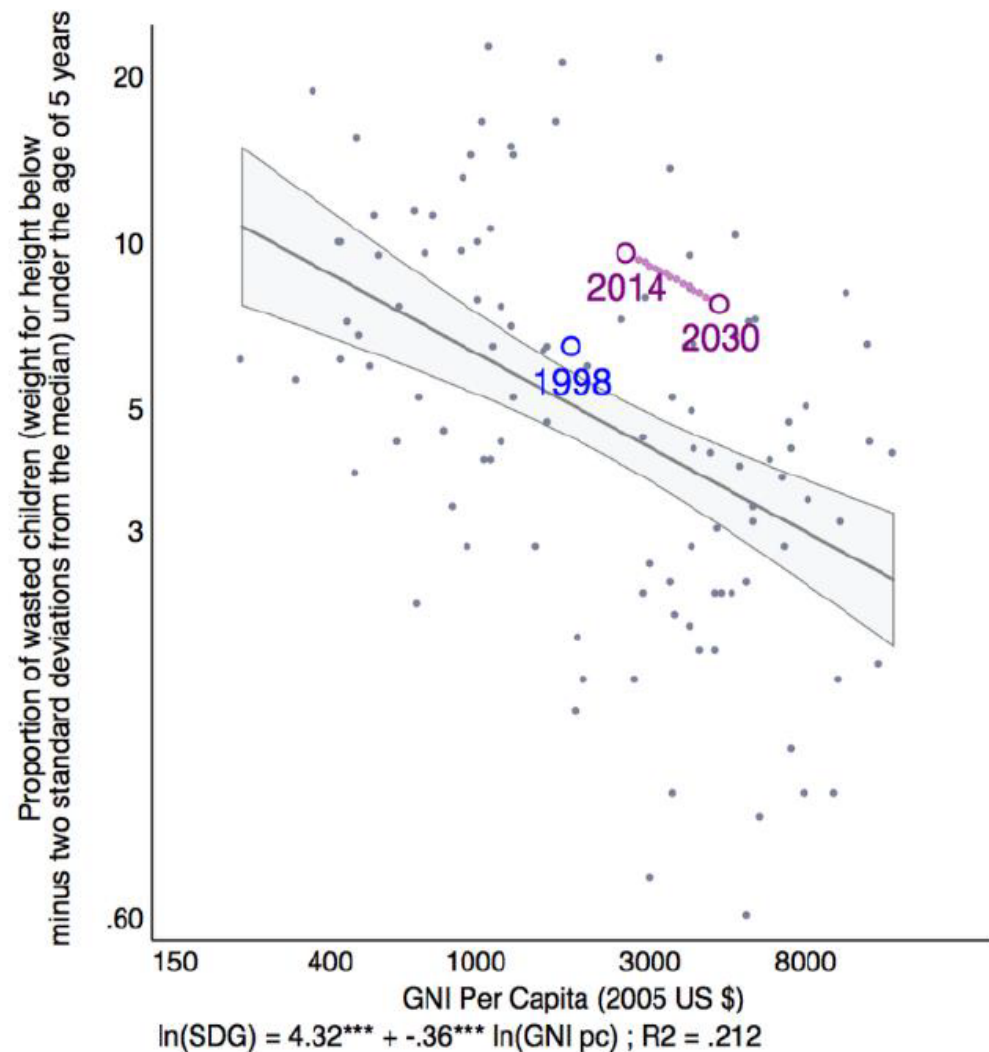


Empowered lives.
Resilient nations.

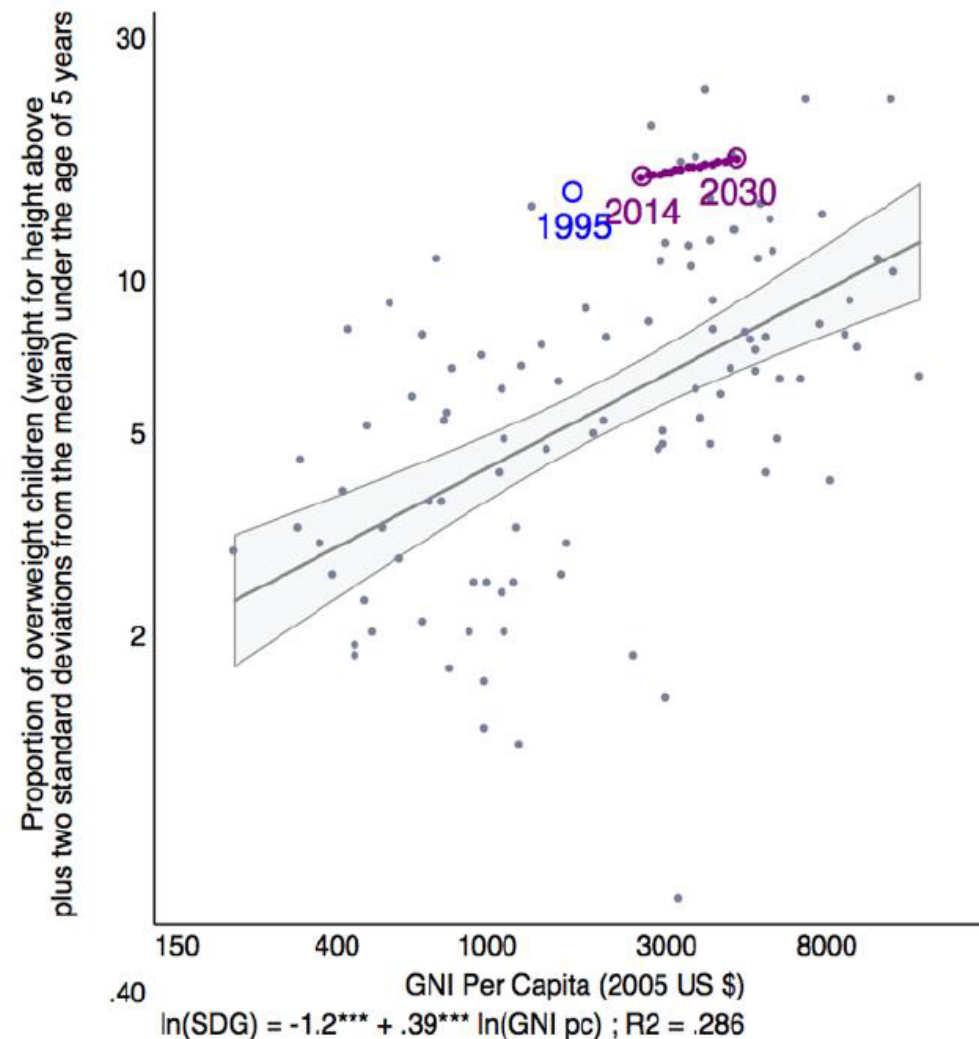
SGDs	SDS	Indicator(s) Description	Current Path	Economic Development	Social Justice	Governance	Women empowerment	Integrated Push
Deviation From Target								
Goal 1. End poverty in all its forms everywhere								
1	1.2.1.b	Percentage of population below \$3.10 (2011\$ PPP) per day; Lognormal	-23%	-2%	-4%	-11%	1%	45%
	1.1.1.b	Percent of the population living on less than \$1.90 (2011 USD) per day	-8%	23%	38%	23%	38%	85%
	1.a.2a	Percentage of total government spending on essential services (education, health)	0%	-1%	28%	0%	1%	22%
	1.a.1b	Transfers as a percent of GDP	0%	1%	9%	0%	1%	15%
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture								
2	2.1.1.a	Percentage of undernourished population	-7%	0%	-3%	-3%	-3%	7%
	2.2.2.a	Percentage of malnutrition (weight for height <-2 SD) among children under 5	-97%	-93%	-90%	-93%	-93%	-80%
	2.2.2c	Severe acute malnutrition (weight for height <-3 SD) among children under 5	-200%	-180%	-190%	-110%	-160%	-60%

ANALYTICAL FINDINGS (World Bank SDGs Diagnosis – 2018)

SDG Goal 2: Zero Hunger



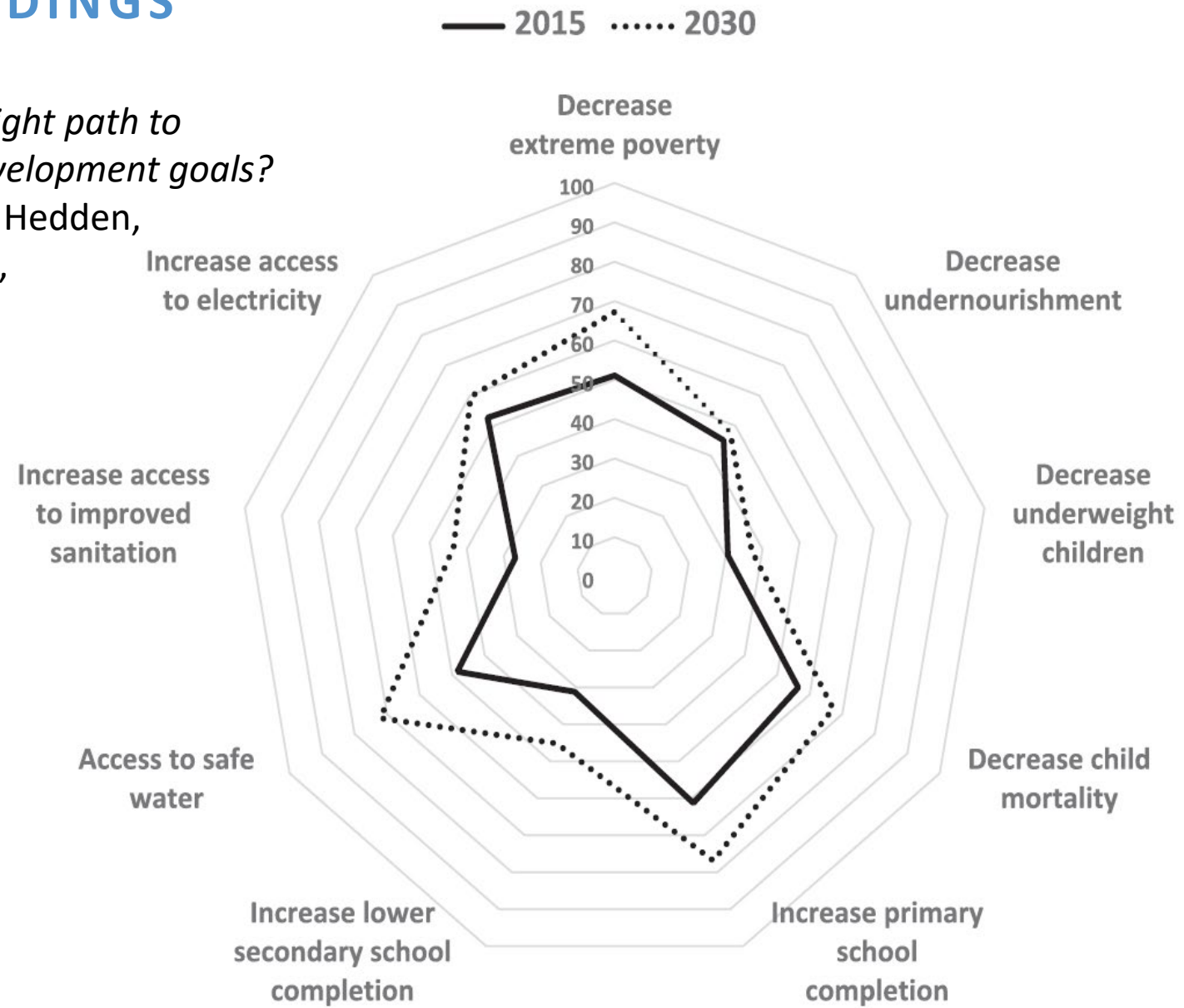
Wasted



Obese

ANALYTICAL FINDINGS

Source: *Are we on the right path to achieve the sustainable development goals?*
Jonathan Moyer and Steve Hedden,
World Development,
Forthcoming 2020)



Percent of countries achieving selected SDG indicator targets in 2015, 2030

SUMMARY



*Empowered lives.
Resilient nations.*

- Malnutrition, Poverty and to a lesser extent undernourishment not responding to various policy scenarios
- Social justice scenario indicate social protection would help
- But incomplete evidence of impact of social programmes on malnutrition

MORE INQUIRY AND ALTERNATIVE SOLUTIONS ARE NEEDED



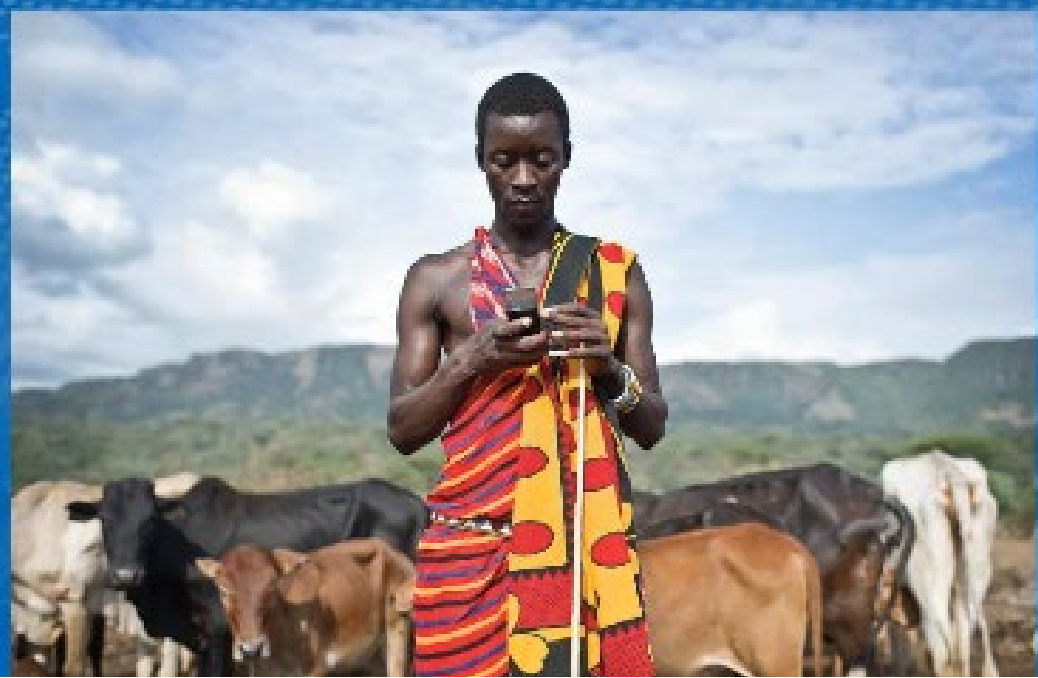
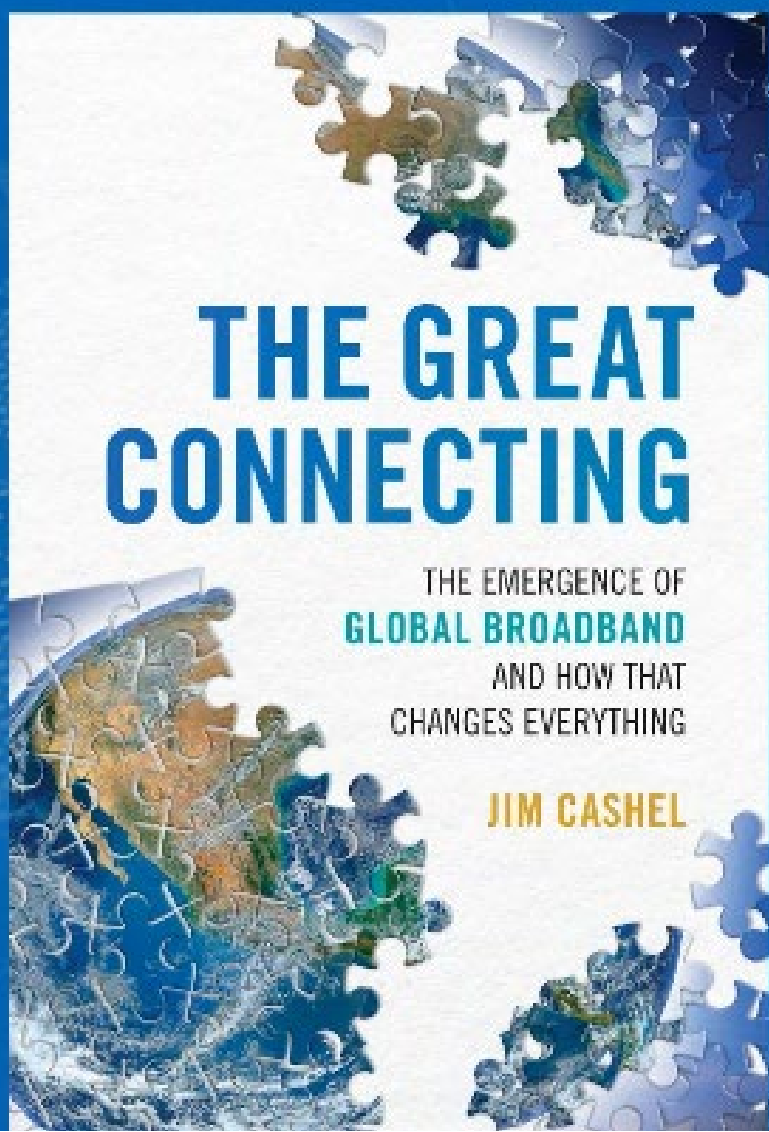
Empowered lives.
Resilient nations.

- Mechanism at plat may not be purely economic
- Egypt “puches below its weight” on malnutrition
- Causes unclear:
 - Food systems?
 - Advocacy?
 - Early childhood support?
- More analysis and Innovation needed
- Big data?

ALTERNATIVE SOLUTIONS ARE NEEDED



Empowered lives.
Resilient nations.



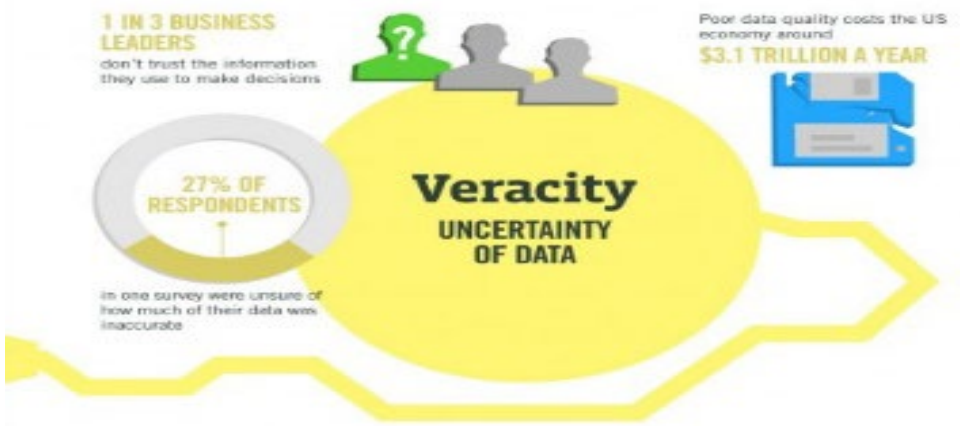
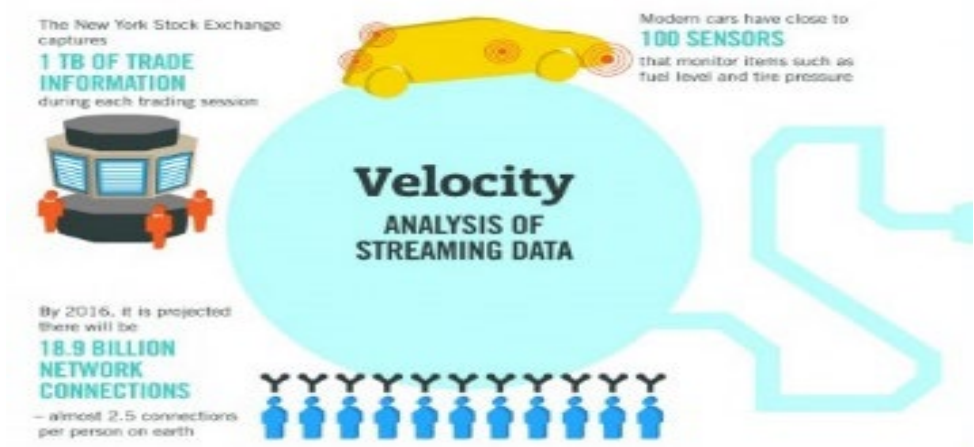
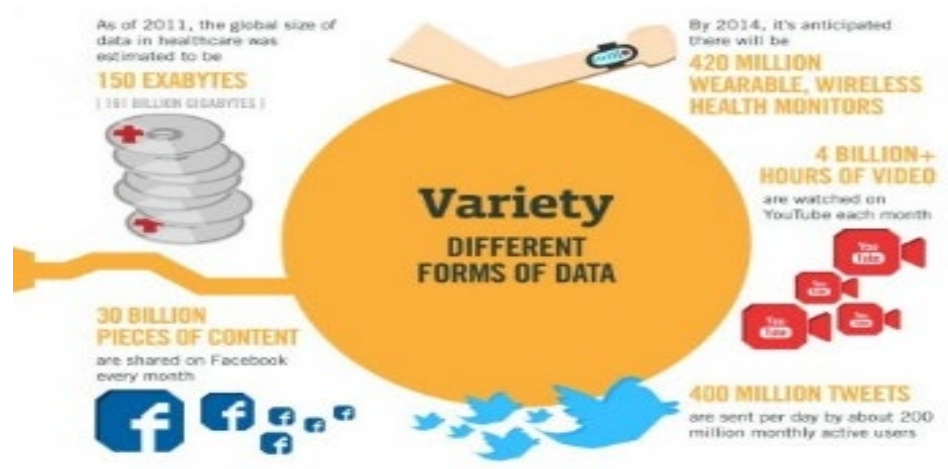
ALTERNATIVE SOLUTIONS ARE NEEDED



Empowered lives.
Resilient nations.

Item	2014	2015	2016	2017
Subscribers of Cell phone (million line)	95.84	93.50	96.25	99.50
Prevalence rate of cell phone (%)	112.19	107.47	108.64	110.34
Users of internet through cell phones (million users)	20.28	25.24	28.77	31.78

ALTERNATIVE SOLUTIONS ARE NEEDED



Sources: Mckinsey global institute, Twitter, Cisco, EMC, SAS, IBM, MEPTEC.