GENDER DD INDEX: EVIDENCE FROM SENEGAL

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Outline

I. Context

II. Concept of DD Index and AU Roadmap

III. What is Gender DD Index

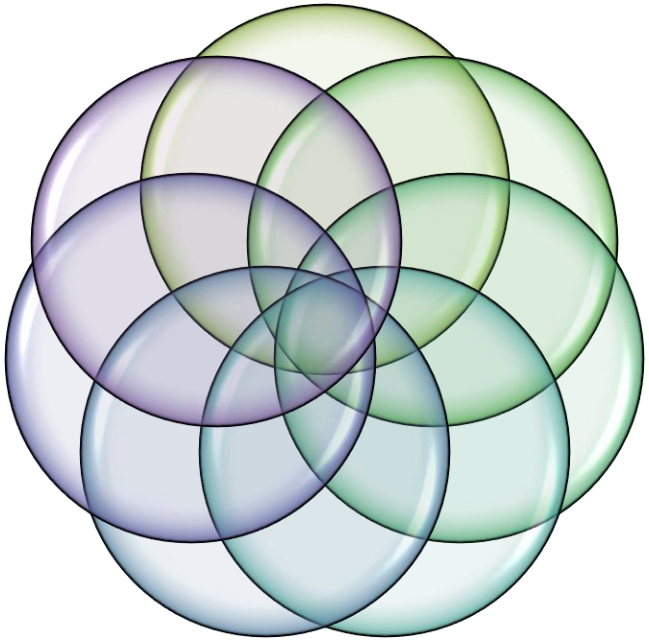
IV. Methodology of Integrating Gender in DD Index

V. GDDI for Senegal

Context

**Demographic Growth in Africa is very speed: 2.7 per year , twice more important than the world average which is near 1.2 (AU, 2016)

**Every year, about 10 to 12 millions young people join the labor Marlet (Afrique Expansion, 2016).



**More than 25 % of the worldwide population will be adult (UNFPA 2016)

**Youth without professional perspectives can be considered as a lost generation which is a threat to social stability sociale » (ILO 2014)

**Basing on the 2045 projections Africa population will be the youngest in the world:

- 400 millions of young people (UNFPA 2016)

**60% of unemployed African people are 15 and 24 years old between (UNFPA 2016)

**African Youth (15 to 24 years) : 37% of the population have attained working age (UNFPA 2016)

» » » CONCEPT OF DD MONITORING INDEX (DDMI)

DDMI: DEFINITION

A synthesis tool which facilitate understanding of all information related to DD ;

A Demographic Dividend monitoring and evaluation system in different countries ;

A visual representation of synthesis index.

DDMI : JUSTIFICATION

- Understanding the DD progress achievement in each country
- Monitoring the evolution of the key indicators in different countries
- Making comparisons at local, national and sub regional levels

DDMI Concept

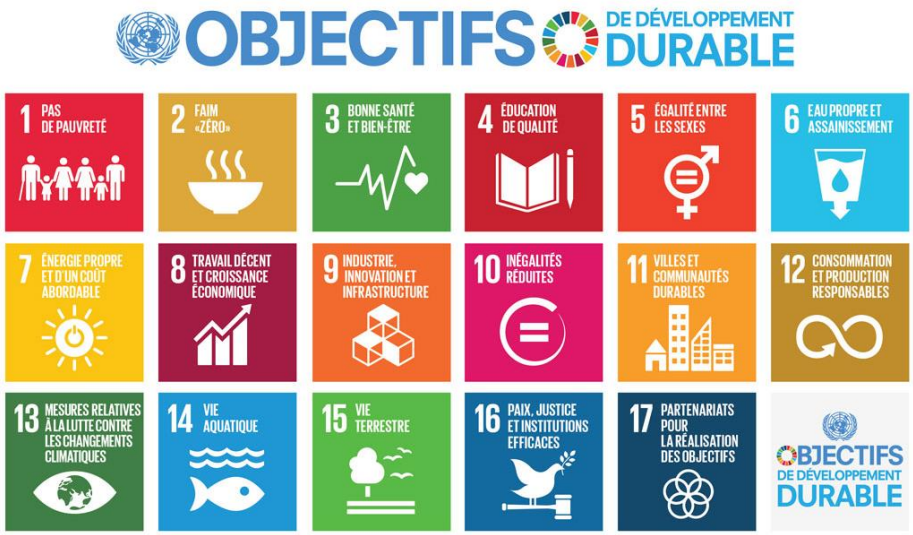
Main Linkages between Demographic Dividend Monitoring index and AU Pillars

AU DD Pillars	Pillars Definition	Basic Link	Theoritical Approach	Background	Dimensions
P1	Employment and Entrepreneurship	Population structure	Life Cycle Theory	NTA Methodology	Dim 1: Economic Dependancy Coverage
P1		Subjective Economy	Welfare theories of Well-being	Better Life Index Methodology	Dim2: Quality of Living Environment
P1		Normative Economy		Poverty Dynamics Methodology	Dim 3: Poverty Exiting
P2	Education & Skills Development	Education	Human Capital Theory	HDI methodology	Dim 4: Extended Human Development
P3	Health &Wellbeing	Health			
P4	Rights, Governance & Youth Empowerment	Institutions, governance	Institutional theory; regional economy theory	Clusters methodology	Dim 5: Networks and Territories

DDMI

Based on AU DD Pillars	Monitoring tool	Set of Demographic Dividend Indicators
Analysis & Modeling tool	SDGs' Complementary Monitoring Tool	Opportunity to make public policy proposals
Innovative Barometer	Scientific basis for effective and efficient advocacy	DD & SDGs Strategic Investment Targeting

DDMI Strategic Interactions



15 SDGs followed with DDMI

6 aspirations related to DDMI

Gender DD Index?

The gender DD index is not just an additional gender index like others

A tool for analyzing country's progress towards women and gender disparities reduction in DD capturing framework

It derives from the DDMI developped by CREG and thus have the DD as entry point

It helps bring out both the gender bias facts and the contribution of women to the DD capturing process

» » » METHODOLOGY OF GENDER DD

Towards to Gender DD

The Gender DD Index derives from the DDMI constructing methodology

Five dimensions with several relevant and sound indicators are included

Most of included indicators are gender-differentiable

❖ Economic Dependancy Coverage Index

- **Objective**: measure capacity of a country to respond to social demand related to youth and seniors life cycle deficit.

- **Theory**: Life Cycle Theory, Modigliani & Brumberg (1954).

Main Source: (UN-NTA 2013), Lee &Mason (2011),

- **Normative Method**

Surplus = Consumption – labour Income

$$E.D.C.I = \frac{surplus}{deficit(youth\ deficit + seniors\ deficit)}$$

❖ Quality of Living Environment Index

- **Objective:** Living Environment refers to all elements that are part of a person's life and how this environment influences his quality of life,
- **Theory**: Welfare theories of Well Being, Easterlin (2010), Dasgupta(1995), Nussbaum&Sen (1993); Sen(1989,1997, 2001)
- **Main Source**: OCDE 2011, 2013
- **Normative Method**

Weighted average of the standard sub dimensions index

DIMENSION 3: P.E.S.I

❖ **Poverty Exiting Synthetic Index**

- **Objective:** Synthetize level of poverty transition within populations

- **Theory**: Welfare theories of Well Being.
- **Main Source**: Dang & Lanjouw (2013); Dang, Lanjouw, Luoto & McKenzie (2011)

- **Normative Method**

$$P.E.S.I = \frac{P \dashrightarrow NP}{NP \dashrightarrow P + P \dashrightarrow NP}$$

P == Poor ; NP== Non Poor

DIMENSION 4: E.H.D.I

❖ Extended Human Development Indicator

- **Objective :** to know level of human development of a country or a region
- **Theory**: Human Capital Theory.
- **Main Source**: Schultz, Becker, Sen and UNDP(2015);
- **Normative Method**
- $E.H.D.I = \sqrt[3]{IH * IE * ICons}$

IH== Health index
IE== Education Index
Icons== Consumption index

❖ Networks and Territories Synthetic Index

- **Objective : C**ollect information about territorial mobility by describing attractivity of zones, human migration, financial flows, goods and services flows as well as the distribution of infrastructures in a territory

- **Theories**: Cluster Theory, Theory of Social Change, Institutional Theory, Regional Economic Development Theory

- **Normative Method**

Weighted average of the standard sub dimensions index

GDDI FORMULA

- This is the geometric average of the five previous synthetic index
- The following method is used to calculate DD Monitoring Index (GDDI)

$$GDDI = \sqrt[5]{EDCI * QLEI * PESI * EHDI * NTSI}$$

GDDI=Gender DD Index

Dimension 1 description

Indicators	Type of indicators	Sources
Education consumption	Gender-specific	HH Survey & SNA
Health consumption	Gender-specific	HH Survey & SNA
Other consumption	Gender-specific	HH Survey & SNA
Earnings	Gender-specific	HH Survey & SNA
Self-employment labour income	Gender-specific	HH Survey & SNA
Population by Age	Gender-specific	Census or Survey

Source: CREG 2019

Dimension 2 description

Criteria or Sub-dimensions	Indicators	Type of indicators	Sources
Civic engagement and Governance	Electoral participation	Non-diff.	Election commission
	Stakeholder participation in the development of regulations	Non-diff.	HH Survey
Social connections	Quality of the social network	Gender-specific	HH Survey
Environment	Atmospheric pollution	Non-diff.	Meteorology data
	Quality of water	Gender-specific	HH Survey
Housing	Number of rooms per person	Non-diff.	HH Survey
	Access to basic sanitary facilities	Non-diff.	HH Survey
	Cost of housing	Non-diff.	HH Survey
Satisfaction	Satisfaction with life	Gender-specific	HH Survey
Work-life balance	Heavy work schedules	Gender-specific	HH Survey
	Time devoted to leisure and self	Gender-specific	HH Survey
Security	Feeling of safety when walking alone in the night	Gender-specific	HH Survey
	Homicide rate	Non-diff.	GPI; Administrative sources

Dimension 3 description

Criteria or Sub-dimensions	Indicators	Type of indicators	Sources
Stability State	CHRONIC POVERTY	Gender-specific	Poverty Survey, ESPS2
	PURE NO POVERTY	Gender-specific	Poverty Survey, ESPS2
Transitional state	POVERTY EXITING	Gender-specific	Poverty Survey, ESPS2
	FALL INTO POVERTY	Gender-specific	Poverty Survey, ESPS2

Source: CREG 2019

Dimension 4 description

Criteria or Sub-dimensions	Indicators	Type of indicators	Sources
Health	Life expectancy	Gender-specific	Census
	Total Fertility Rate	Non-diff.	DHS; Census
Education	Average duration of schooling	Gender-specific	HH Survey
	Expected duration of schooling	Gender-specific	HH Survey
Living Standard	Consumption per capita	Gender-specific	HH Survey

Source: CREG 2019

Dimension 5 description

Criteria or Sub-dimensions	Indicators	Type of indicators	Sources
Urbanization	Population density	Gender-specific	Census / HH survey
	Average size of households	Non-differentiable	Census / HH survey
	Urbanization rate	Gender-specific	Census / HH survey
	Ratio of renter households to owner households	Gender-specific	Census / HH survey
Migration	Entry index	Gender-specific	Census / HH survey
	Exit index	Gender-specific	Census / HH survey
Infrastructure and basic social services	Index of access to infrastructure and basic social services	Gender-specific	HH survey
	Quality index of infrastructures and basic social services	Gender-specific	HH survey
Financial flows	Transfer index	Gender-specific	HH survey
	Rate of access to formal transfer services	Gender-specific	HH survey / Central Bank database
	Food Consumption per capita	Gender-specific	HH survey

Source: CREG 2019

READING GRID SCALE

How to interpret the GDDI SCALE ?

Between 80% and 100%	• **HIGH:**
Between 50% and less to 80%	• **MEDIUM:**
Between 0% and less to 50%	• **WEAK:**

Source: CREG 2017

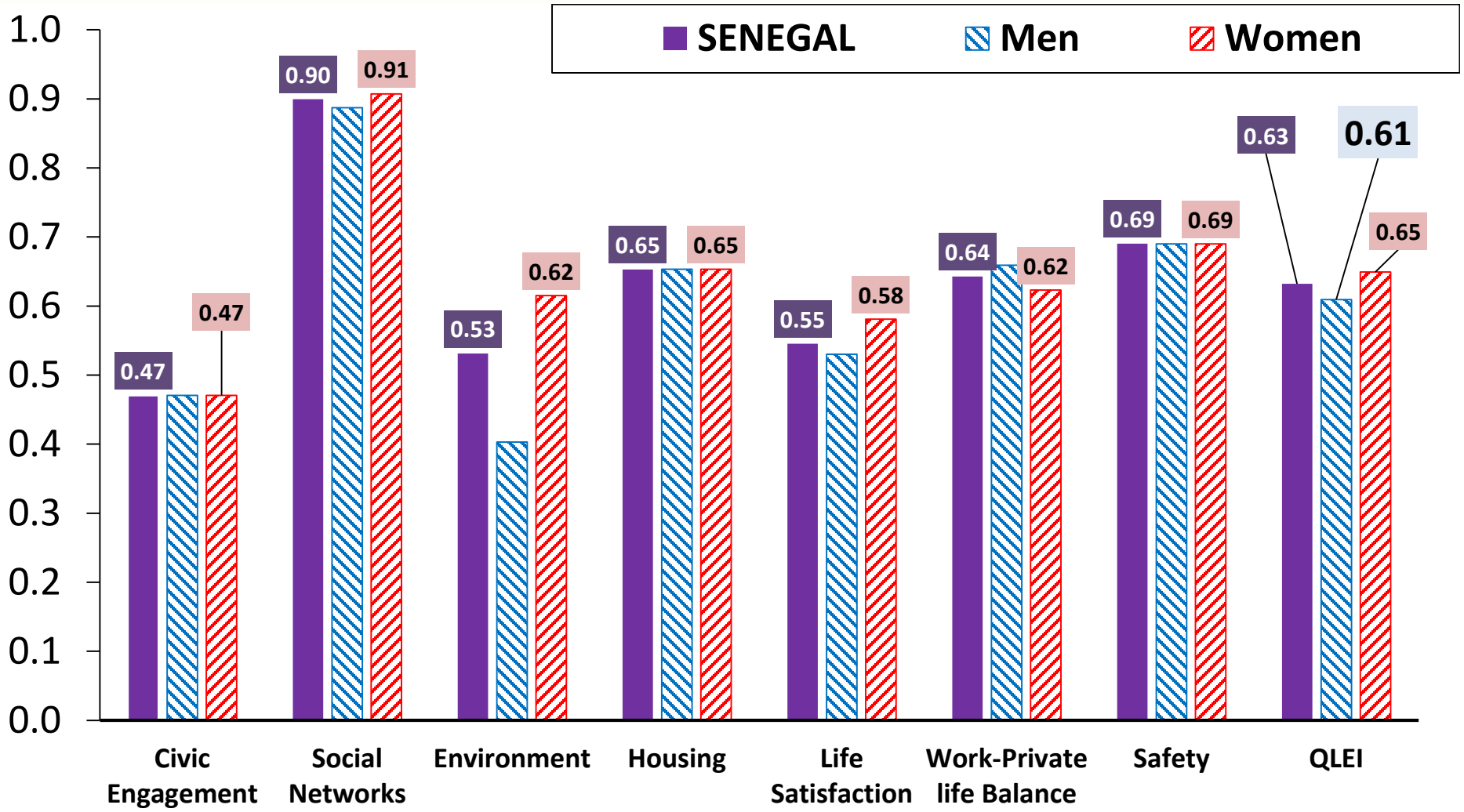
» » » DDMI FOR SENEGAL

RESULTS DIMENSION 1

Economic Dependancy Coverage Index	SENEGAL	Men	Women
Age Group with Surplus	30-63 years	27-69 years	37-58 years
Surplus (Billions XOF)	1 260	1341	78
Deficit (Billions XOF)	3 399	1 470	2 089
Overall Life Cycle Deficit (Billions XOF)	2 139 (32% of GDP)	128	2011
EDCI	37%	91%	4%

Source: CREG 2019

RESULTS DIMENSION 2



Source: CREG 2019

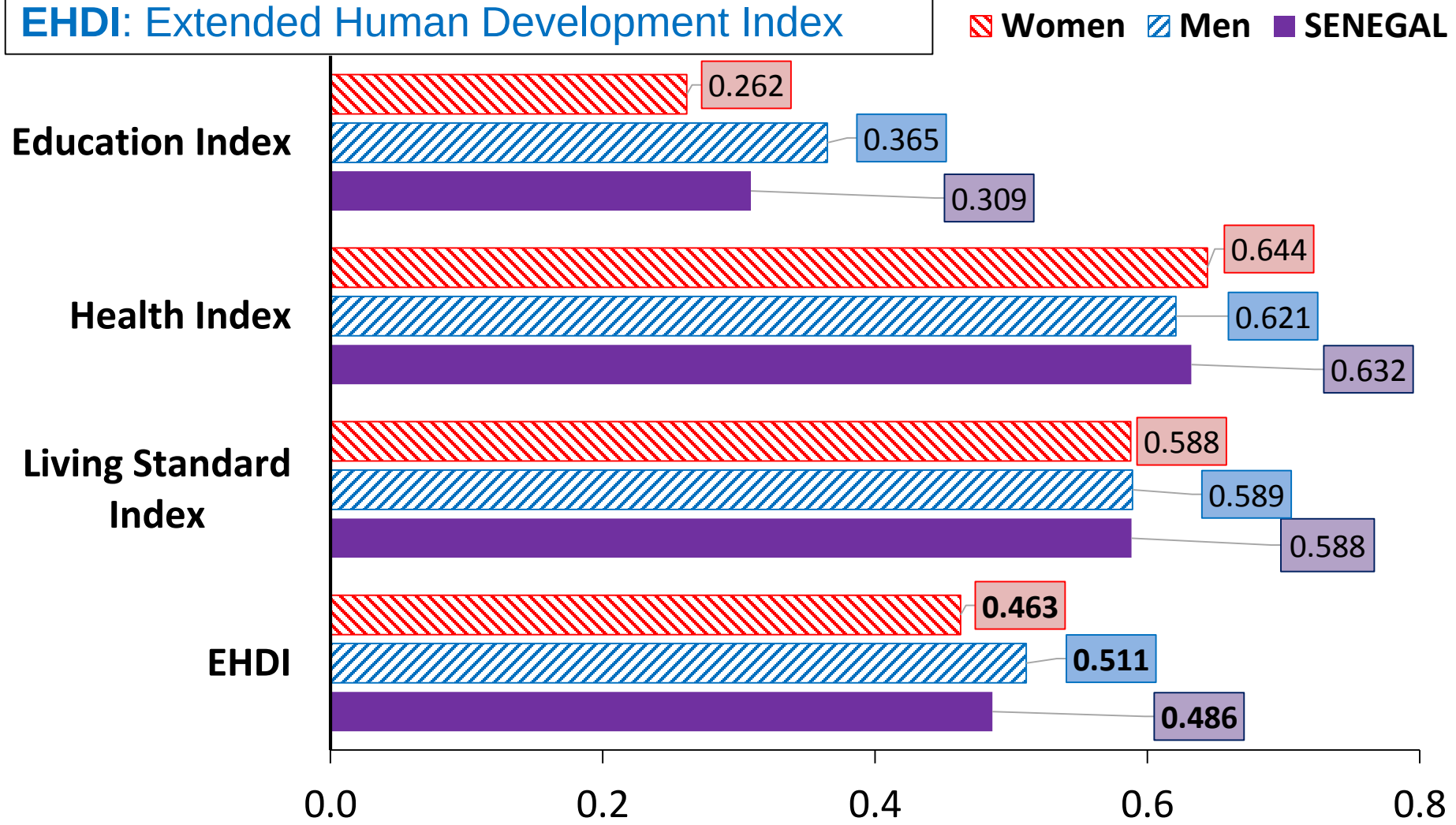
RESULTS DIMENSION 3

Poverty Exiting Synthetic Index	SENEGAL	Men	Women
Chronic Poverty	23%	28%	19%
Pure No Poverty	38%	32%	41%
Poverty Exiting	21%	21%	24%
Fall into Poverty	18%	19%	16%
P.E.S.I	58%	53%	64%

Source: CREG 2019

RESULTS DIMENSION 4

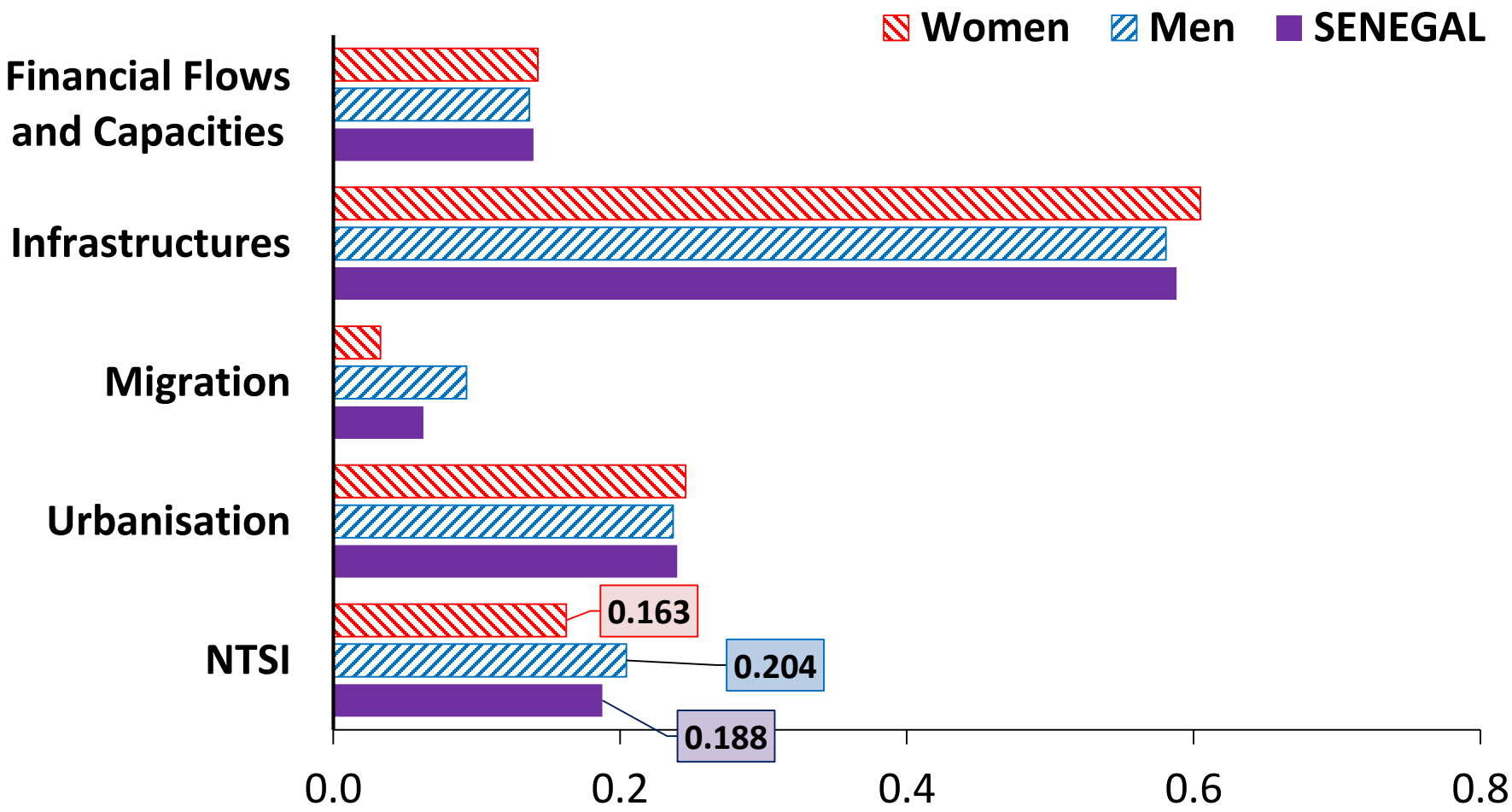
EHDI: Extended Human Development Index



Source: CREG 2019

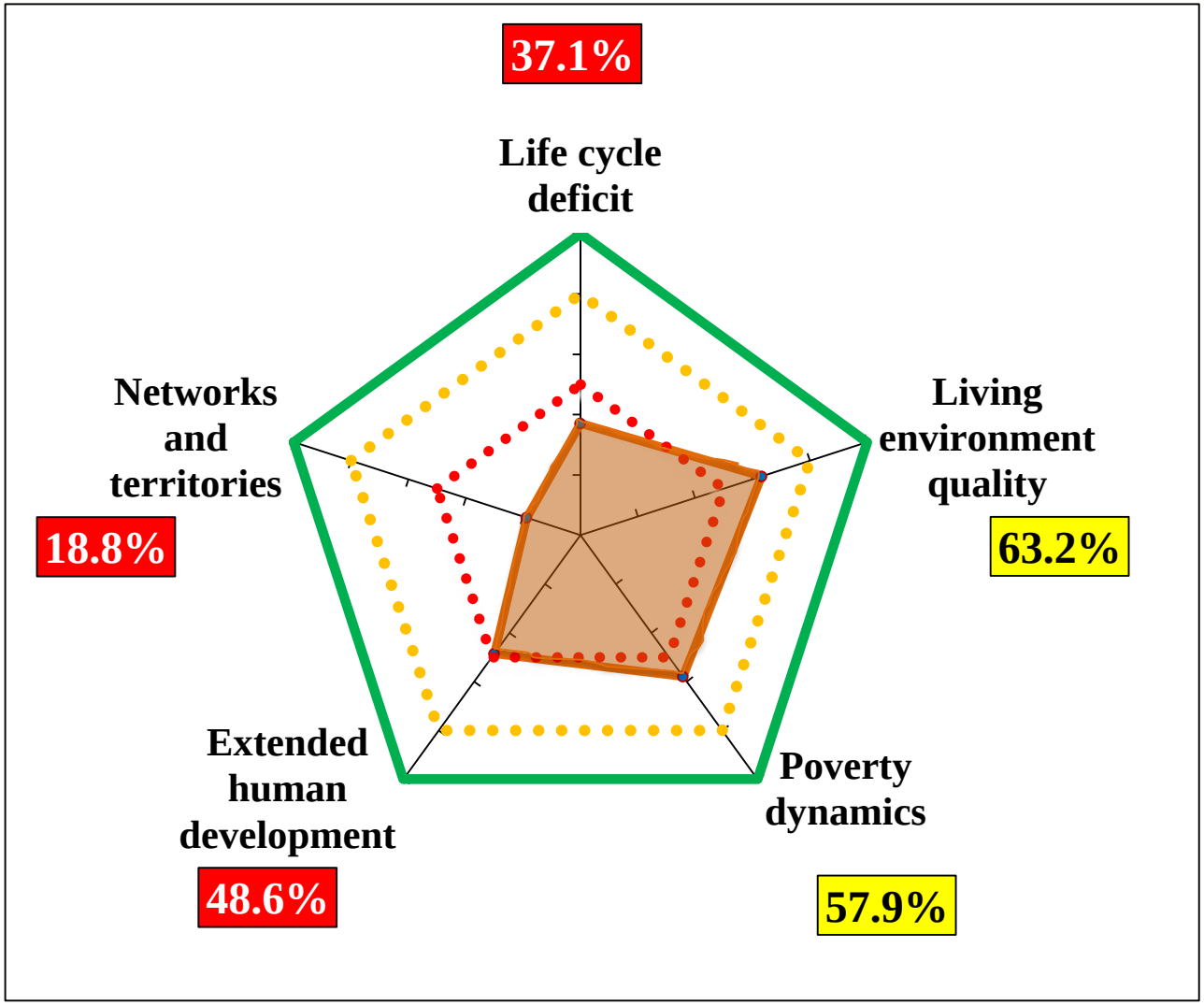
RESULTS DIMENSION 5

NTSI: Networks and Territories Synthetic Index



Source: CREG 2019

SYNTHESIS DDMI-SENEGAL



Legend :

- < 50%
- 50% - 80%
- >80%

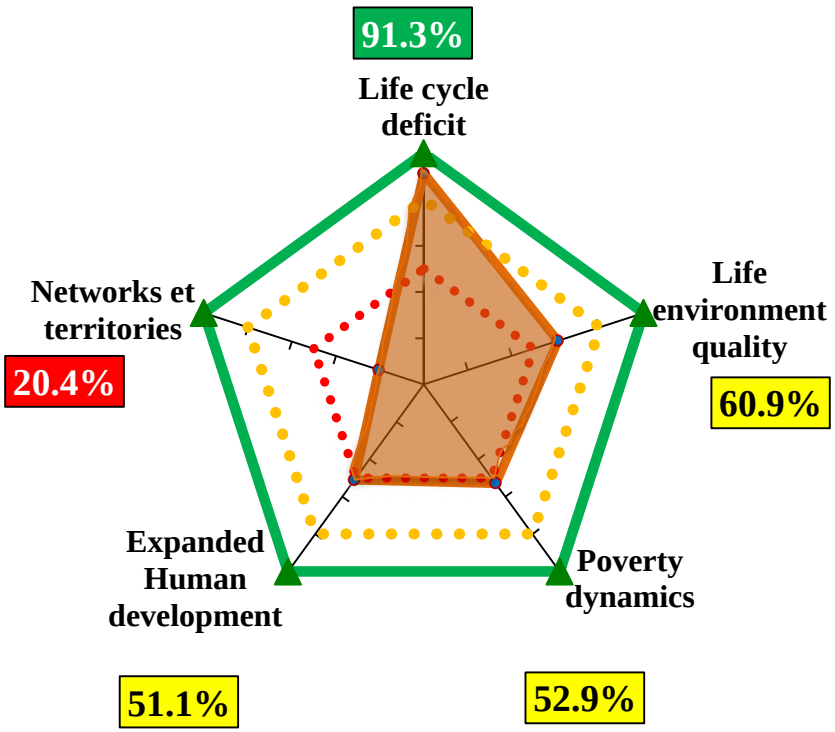
DDMI= 41,5%

» » » GDDI FOR SENEGAL

Gender DD Index Senegal

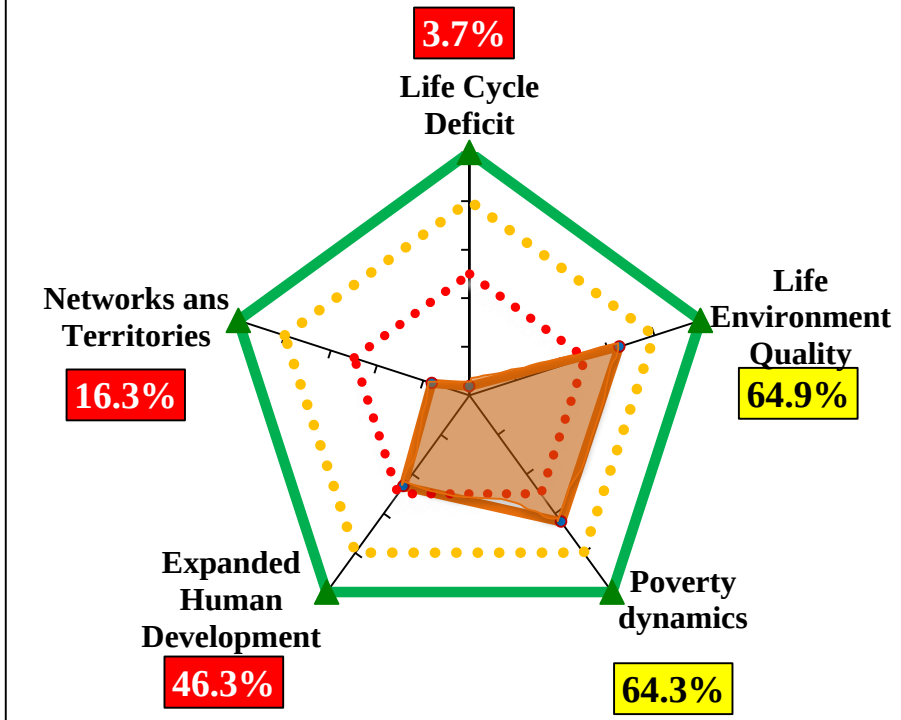
MEN

GDDI_Men = 49,8%



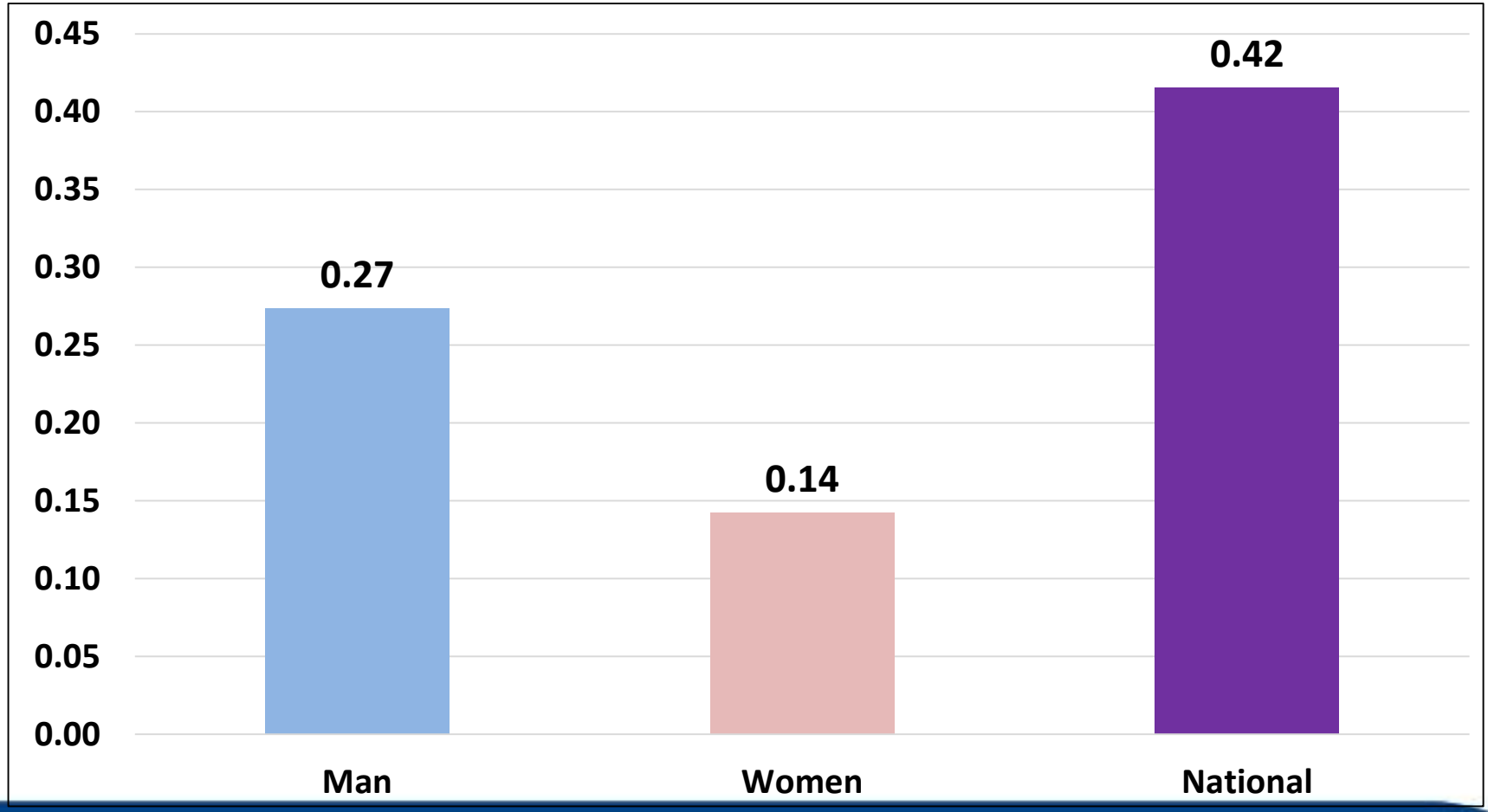
WOMEN

GDDI_Women = 25,9%



Gender Contribution to DD

- **Men contributions in terms of share is about 66%**
- **Women contributions as share is around 34%**



Conclusion and Recommendations

- Senegal are not yet reaping benefit from its demographic structure
- DD_Men score is around to times big than Women_DD
- Men contributes up to 66% and women 34% to DD

➢ Important investments to economically empower women in Senegal is needed

➢ Deeping efforts towards humain development for both men and women

THANK YOU