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Territorial Approach to FNS Policies and Strategies



Territorial Approach to Food Security and Nutrition (FSN) Policies

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Ormea, June 2015



Structure of the Seminar

1. Rationale of a territorial approach to FSN
2. Defining “territories”
3. Programming with a territorial approach:
The Case of Al Ghab
4. Applying a territorial approach



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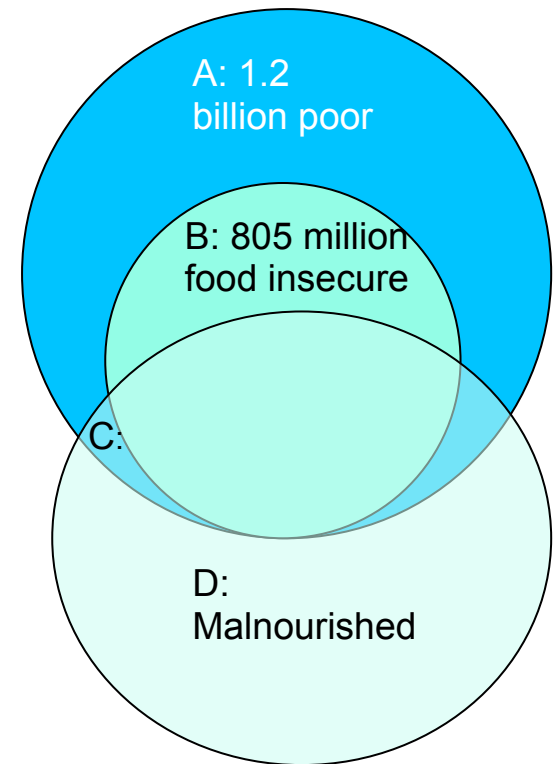
Rationale of a territorial approach to FSN



Food Insecurity and Rural Poverty



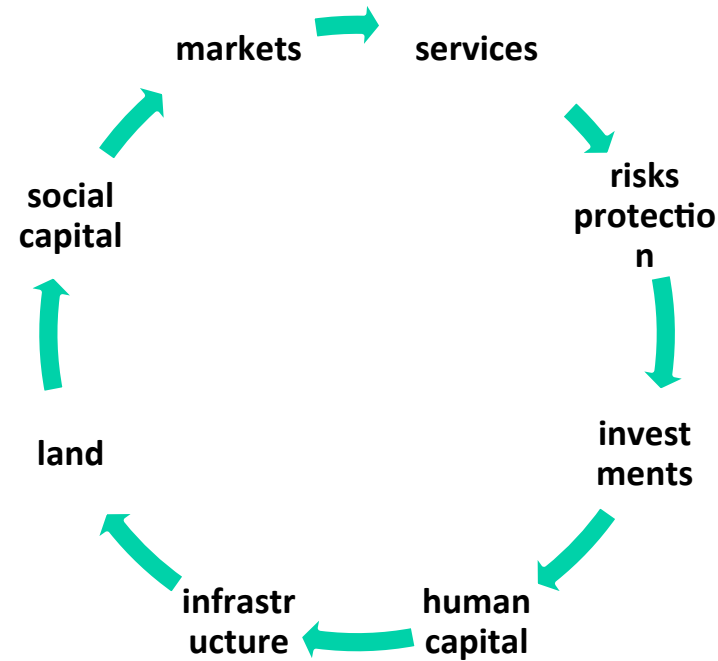
- ❖ We produce enough food in the world to feed everyone..
- ❖ ... and the 2015 MDG 1 target of halving poverty and hunger has been met
- ❖ ... yet about 1 billion continue to live in extreme poverty, 800 million people are food insecure, and more than 800 million are malnourished
- ❖ Hence policies to address poverty need to be coordinated with FSN policies





“Geography Matters”

- ❖ National averages hide important within countries differences
- ❖ Poor and food insecure tend to live in rural areas with poor access to:





The geographical divides of FNS

South Africa:

- self-sufficient at the national level (availability), 64% of households are food insecure (access);
- FNS strong spatial dimension: most food insecure live in some provinces, while small percentages in the Metros;

Latin America and Caribbean:

- At national level, Guatemala and Honduras not on track, Peru and Bolivia on track, but at local and regional levels the largest disparities in chronic undernutrition occur in these Countries;
- Argentina and Brazil: strong within country disparities in FNS;

Vietnam:

- food insecurity associated with ethnic minorities living in remote rural areas (60% of undernourished)
- nutritional vulnerability higher in rural areas;

Ghana: food insecurity affects 5% of the population (on average), 34% in the Upper West region.



Transforming Agriculture and Rural Areas

- ❖ Developing agriculture is essential... but not sufficient:
 - **Environmental challenges:** need to increase food production through sustainable intensification (new **green** revolution)
 - **Demographic challenges** need to invest in human capital and engage youth
 - **Employment challenges** need broad-based rural development, value chain development and dynamic employment creation
 - **Connectedness challenges:** develop infrastructure and strengthen rural-urban linkages
 - **Institutional challenges:** develop rural institutions and empower drivers of change

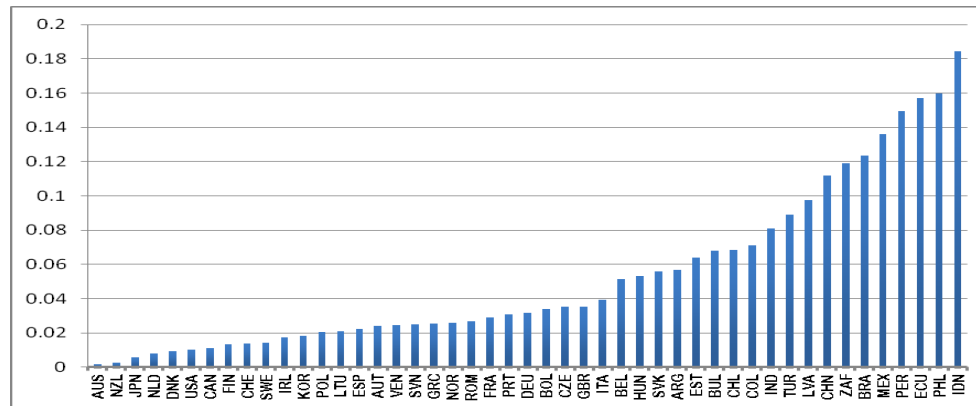
➔ ***All of these challenges have a territorial dimension***



FNS and Growing disparities

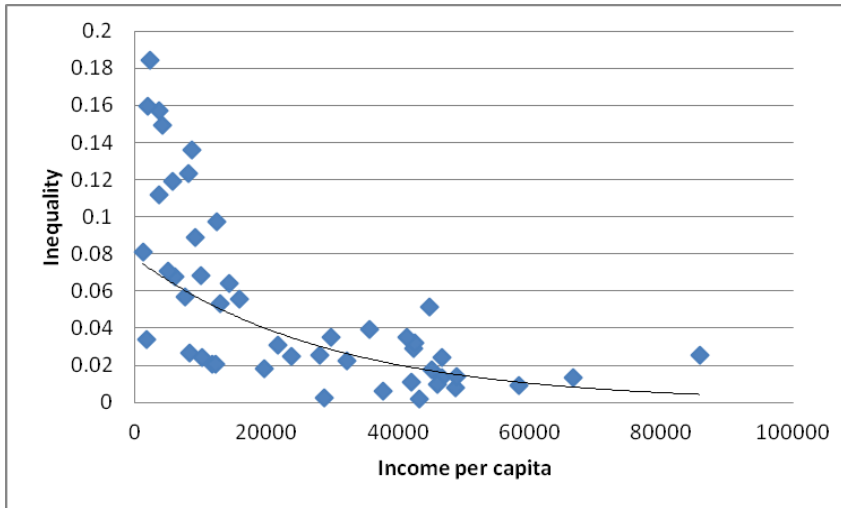
- The geographic dimension of FNS mirrors a world-wide pattern of growing economic disparities
- Less developed countries suffer from the highest level of territorial inequalities
- With the emergence of globalization, territorial inequalities have tended to rise

Differences in territorial inequalities among selected countries

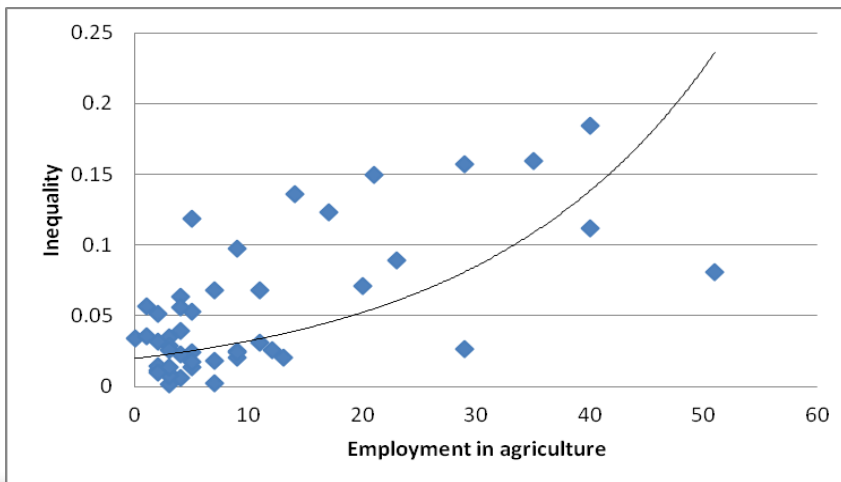




Where are regional disparities higher



- High income countries generally have low level of terr. inequalities: strong negative association between income and inequalities



- Countries with a high level of inequality also tend to be those with a larger share of the population employed in agriculture (e.g. India, Indonesia, China, and the Philippines)



Hence

- Vicious cycle of underdevelopment and food insecurity for remote and poorly endowed regions:
- lack of agglomeration, poor integration and distance to markets curtails their capacity to develop, and
- poor development prospects raise the risk of food insecurity,
- which, in turn, further undermines the potential for development



The role of policy: two schools of thought



	<i>Spatially-Blind Policies</i>	<i>Place-Based Policies</i>
Theoretical foundations	New Economic Geography (NEG) + Urban Economics	NEG + Institutional and Evolutionary Economic Geography + Endogenous Growth Theory
Policy Objective	Economic Growth (Efficiency)	Efficiency and Equity
Agglomeration for economies of scale	Yes (spillover effects)	Yes (but also the potential cons – backwash effects – have to be considered)
Environmental concerns	No	To be mainstreamed in public policy
Social concerns	Implicit in Kuznets curve	To be mainstreamed in public policy
Territorial targeted policies	In extreme situations	Needed to address market failures
Institutions	Formal	Formal + Informal
History and development processes	Rostovian linear development assumption	Development processes are highly heterogeneous
Migration	Costless	Economic, social and political costs
Pathways to Economic Development	Development Model based on Mega-Urban Concentration	Multiple possible pathways and multiple spatial arrangements
Approach to Development	Focus and investment on urban poles	All regions have a development potential
Inter-regional Convergence	Market convergence happens naturally as a spatially-blind process as long as market barriers are removed	Promoted through a developmentalist approach aiming at optimizing the development potential of all regions
Decision making	Top-down (the State knows best)	Bottom-up (within a multi-level governance system):



The territorial paradigm recognizes

Multidimensionality of FNS (multi-objective, multi-sectoral, multi-governance) requires a holistic approach as opposed to sectoral approaches prevailing in the past

❖ Multi-objective:

- economic (supply and demand of food)
- social (access to food, decent employment, poverty reduction)
- environmental (long-term sustainability of food production and consumption)

❖ Multi-sectoral:

- Agriculture and agro-business
- Other non-farm enterprise development
- Environment and climate protection and NR management
- Transport and infrastructure
- Social protection and social services
- Labour market

❖ Multi-level governance:

- Central, local, communities, CSO's
- Formal and informal local institutions (often at the forefront in addressing FNS) to promote an inclusive FNS policy process



Territorial Approaches provide framework for policy coherence

- By using a systemic and network approach TA are able to capture the diversity of local socio-economic dynamics and understand opportunities that would be missed with one-dimensional or one-size-sits-all policies
- TA optimize output and development by encouraging all territories to realize their development potentials
- TA promote participation from all local stakeholders and empowerment of local communities while establishing a common the vision for development
- TA enhance coherence and synergies between social, economic , environmental and institutional policies, thus potentially enhancing impact and efficiency



Summary and Conclusion

- ➔ **Globalisation** is not only boosting competition among enterprises. It also raises competition among areas, i.e., specialisation of areas (agglomeration, polarisation) which can lead to increased disparities
- ➔ **Disparities** and inequalities exist because the economic dynamics of “spaces” (cities, regions, and countries) are very different from each other.
- ➔ **Economic efficiency.** Disengagement of Governments to the benefit of private investments affects territories differently as private investments are driven by prospects of financial returns and will therefore be allocated where the prospects are higher. Moreover, same investment in diversely endowed territories will not generate the same returns.
- ➔ **Bridging national policies and local implementation.** Knowledge of territorial dynamics enables policy makers to better value the territorial potential as a means to improve efficiency in policy formulation and investment allocation.
- ➔ **Empowerment and ownership.** Local actors know their problems and needs, and how to address them.



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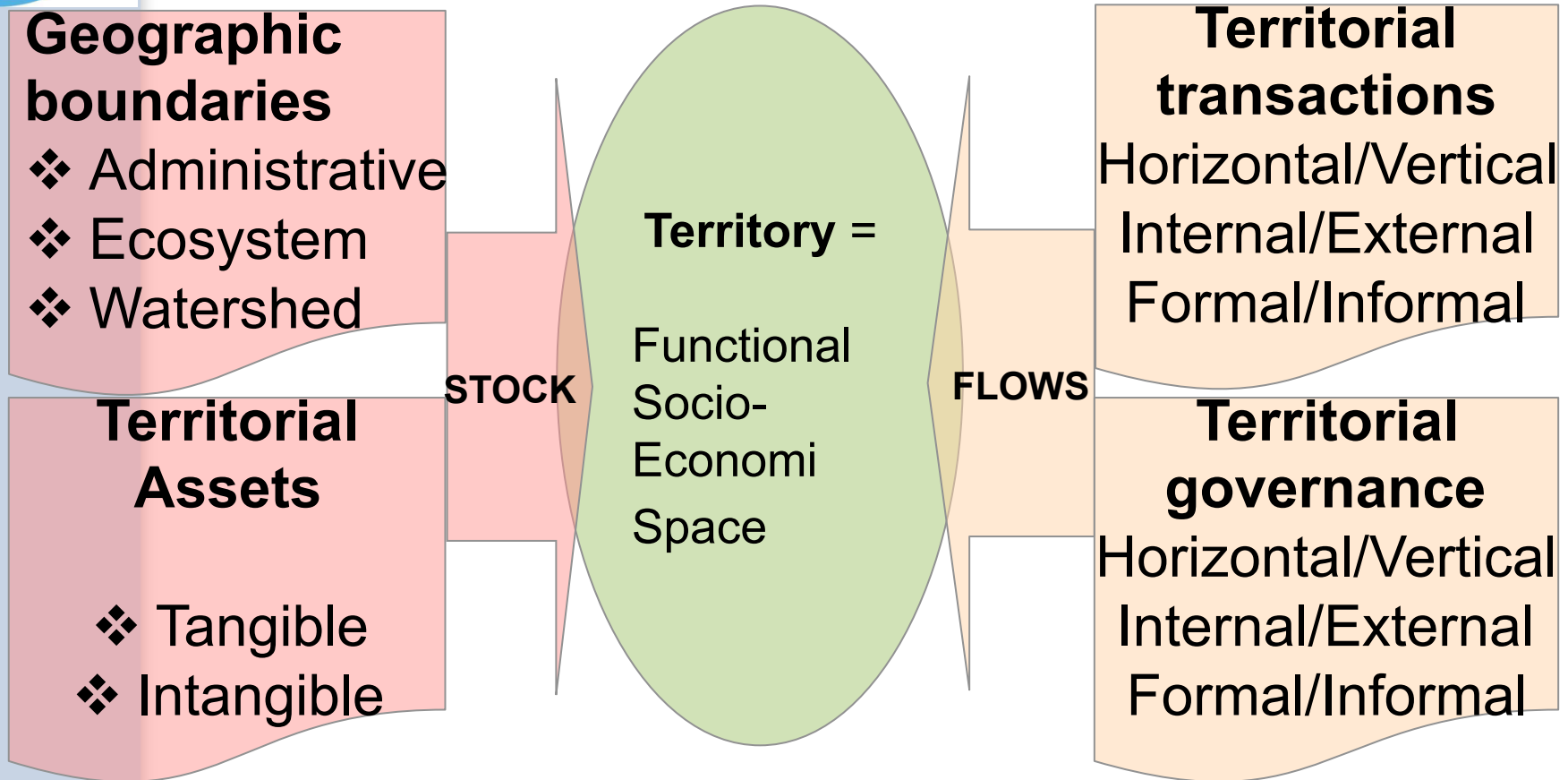
Territorial Approach to FNS Policies and Strategies



Defining “territories”



Defining Territories





Territorial assets

Tangible

- 1 Productive sectors
- 2 Cultural heritage
- 3 Infrastructure
- 4 Public utilities
- 5 Location and natural resources

Intangible

- 1 Cultural exchanges
- 2 Distribution of welfare
- 3 Economic and cultural leadership
- 4 Traditions
- 5 Social values



Territorial transactions and interdependencies

1

Multi-actor,
Multi-sector,
Multi-level

2

Taking place within established regulatory
frameworks, formal and informal

3

Subject to changes and corrective measures to
achieve FS objectives

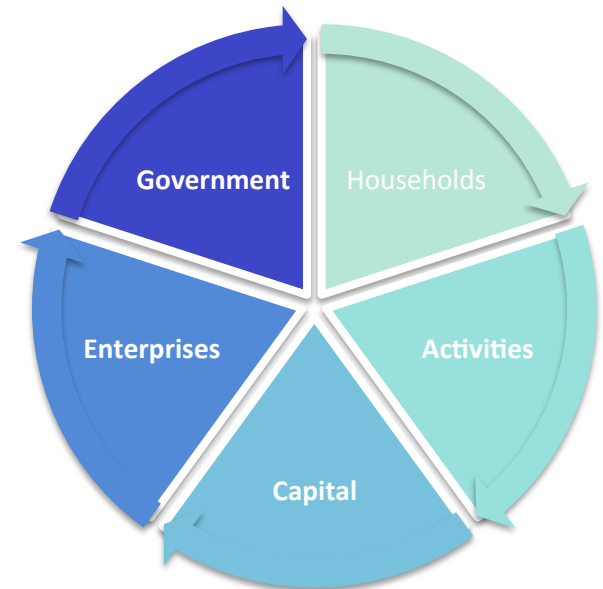
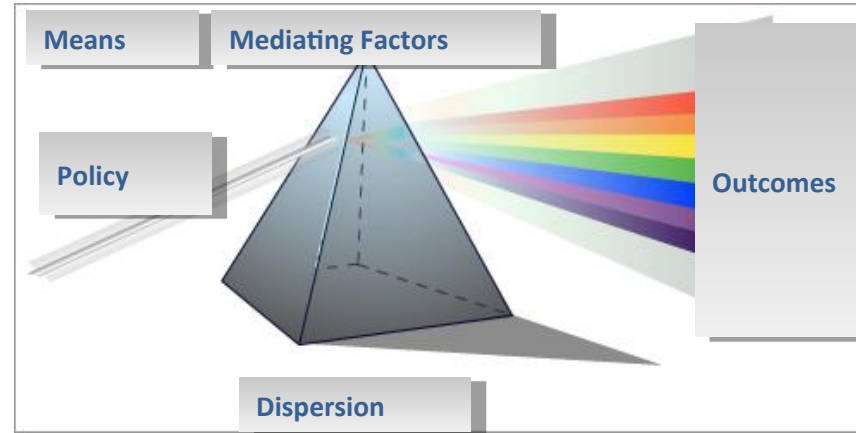
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Within the context of conflicting interests of
stakeholders who exert pressure on policy
makers



The role of territorial assets

- ❖ They constitute the “prism” through which the intended objectives of the **means** are translated into **actual outcomes**
- ❖ They underpin the structure of **socio-economic systems** and their dynamics (actors’ exchanges)
- ❖ The **composition and relative importance of factors** varies according to geographic areas (“territories”)
- ❖ Hence **one-size-fits-all-policies** are not an option: Means should be **tailored** to territorial specificities





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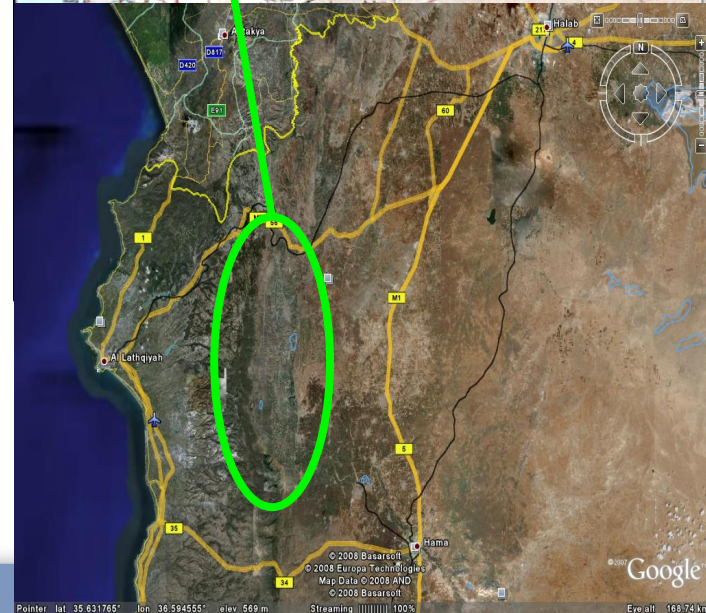
Programming with a territorial approach: The Case of Al Ghab



The Al Ghab “territory”

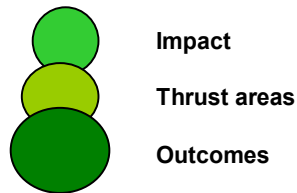
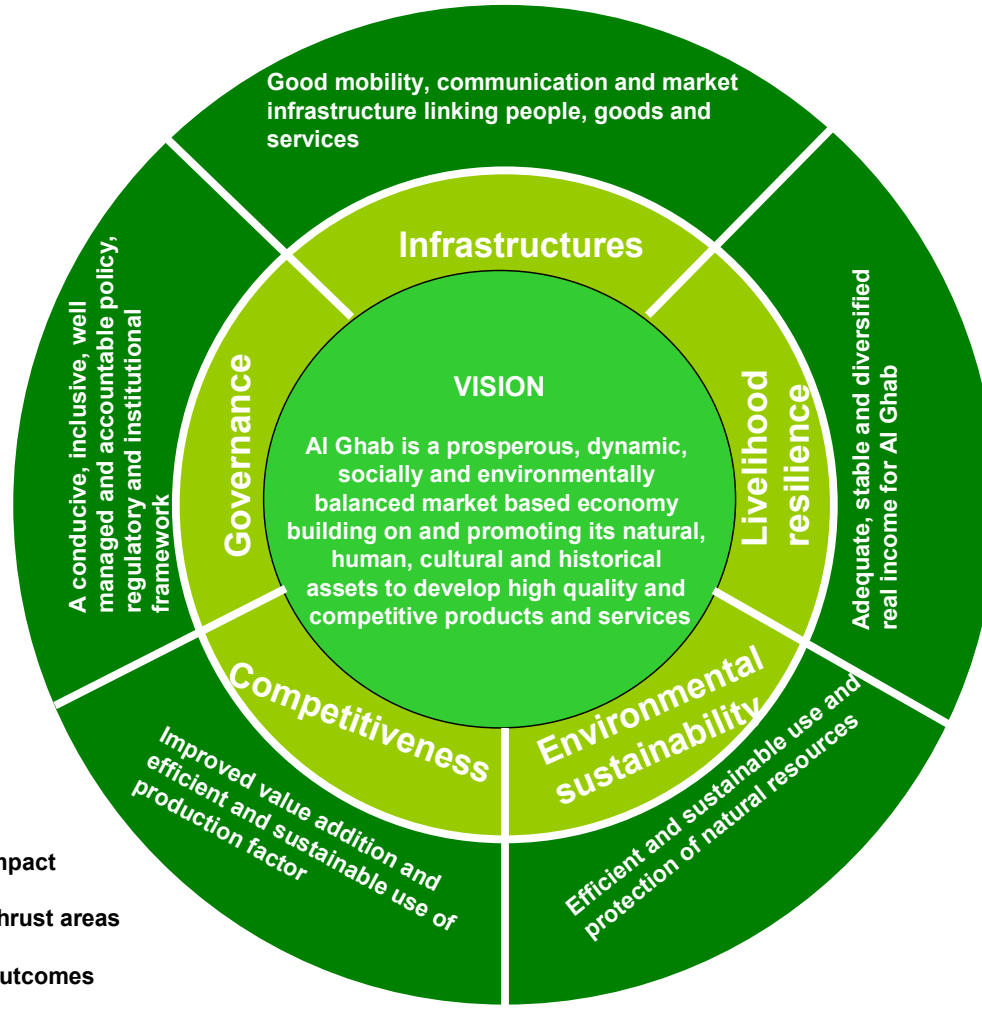
The Problem

- 140,000 ha plain situated in the Hama Governorate (Syria)
- Al-Ghab paradox: **resource rich poor area**. A huge reservoir of agricultural resources, but the level of development and FNS is not proportionate to its potential
- Any development model for the region will hardly succeed if **agriculture is not placed at the centre** as the engine of growth.
- **But agriculture is not sufficient to absorb unemployment**. Other related sectors presently poorly developed can help the modernization process of agriculture and achieve FSN and income generation





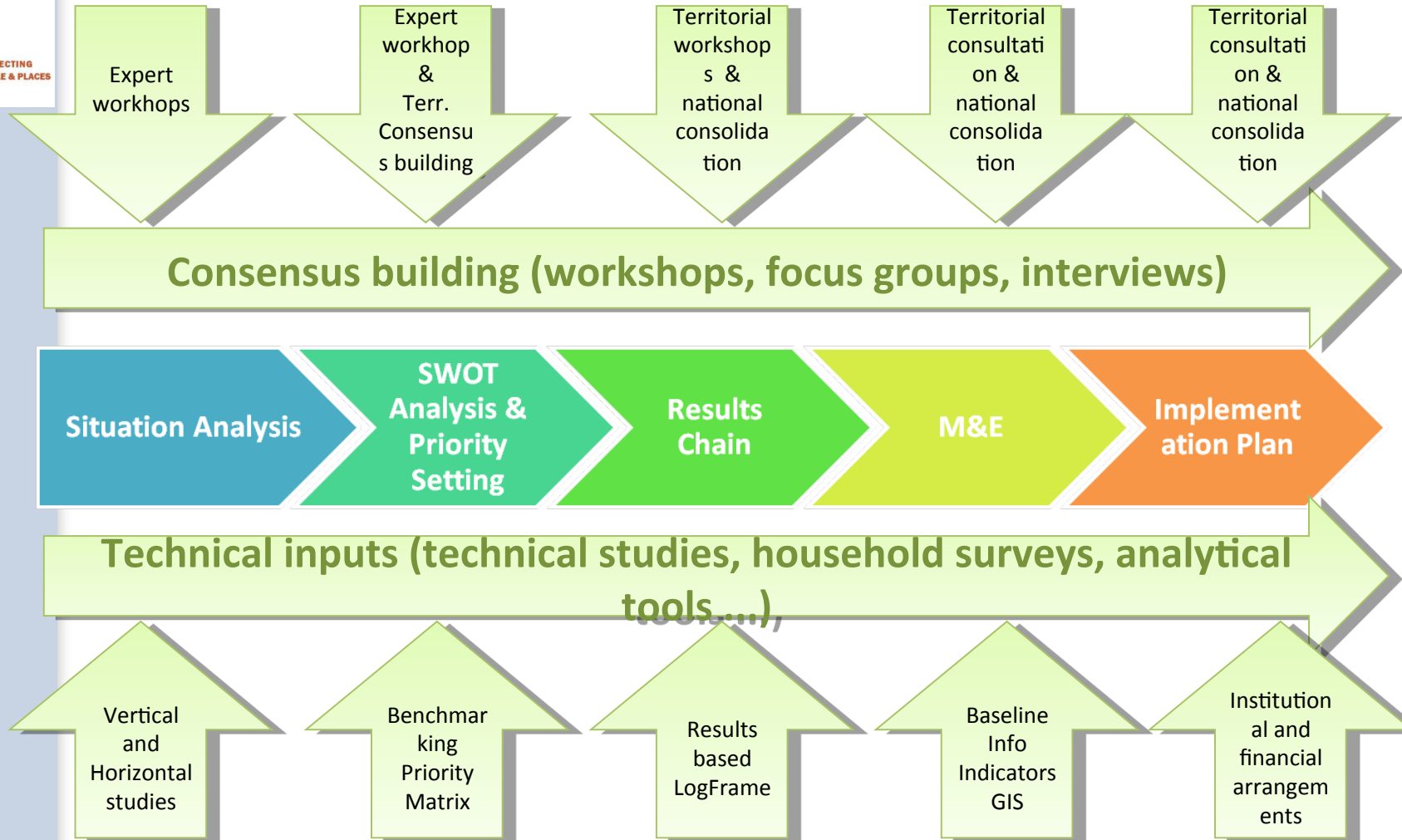
The vision





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Process





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Focus on Territorial Analysis

Tool: The Territorial Capital Index (TCI)

A livelihood-based composite index that provides a synthetic measure of the

- productive
- human
- physical and
- social assets

or the territorial capital contributing to food and nutrition security and more in general to the development of given.



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Territorial Approach to FNS Policies and Strategies

Defining homogeneous sub-areas to be analysed

1. Mountains villages
2. Western foot of the mountain
3. Al Ghab valley
4. El Zawya mountain
5. Tar El Ola and El Asharna



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Territorial Approach to FNS Policies and Strategies

Defining the Al Ghab Capital Endowment

1. Education
2. Infrastructure and Dwelling
3. Social Safety Nets
4. Environmental Risk
5. Poverty
6. Labour Market Efficiency
7. Sectoral Diversification
8. Tertiary Specialization

All having the same weight



Informing each capital with indicators

1. Education

1. Share of people which are not illiterate
2. Share of people with up to primary education
3. Share of people with up to Secondary education
4. Share of people with University or more

2. Infrastructure

1. Share of households with access to improved drinking water
2. Share of households with access to sanitation facilities;
3. Share of households not deprived in terms of house wall material
3. Share of households not living in crowded houses

3. Safety Nets

1. FORMAL: school food rations; rations for malnourished; free food; free health care; financial assistance
2. INFORMAL: borrowing money from relatives; receiving money from friends

4. Environmental Risk

1. Share of people living in areas without risk of droughts or floods
2. Share of farmers by without difficulties to expand due to: pest, animal diseases and soil qualities (three variables clustered)



Informing each capital with indicators

5. Poverty

1. Multidimensional Poverty Index MPI
2. Subjective non poverty rate
3. Share of people satisfied about the current living standards
4. Relative poverty measures P0, P1 and P2
5. Share of people not perceiving a deteriorating living standard level (compared to 5 years earlier)

7. Labour Market Efficiency

1. Female to male wage ratio
2. Share of kids 10-17 years not involved in the labor market
3. Availability of farmers' association in village or in nearest village
4. Per capita income

6. Level of Equality

1. Gini Coefficient (the higher the better)
2. Theil Index (the higher the better)
3. Inverse ratio of consumption of richest to poorest quintile

8. Sectoral Diversification

1. Share of not employed in agricultural activities
2. Non farm income (%)
3. Gini Index of employed by sector
4. Level of diversification of non agricultural activities (coefficient of variation)

9. Service sector

1. Share of consumption of: equipment supplies, ordinary maintenance works, various goods and services, communications
2. Share of income by: hotel and restaurants, finance, insurance and real estate, services



Control variable: Food Security and Nutrition

Food Security & Nutrition Index

1. % households experienced food shortage during the past 12 months
2. % household expected to suffer from food shortages next year
3. % of households below the food-poverty line (consumption bundle)
4. poverty gap (amount of consumption needed to pull up poor to the food-poverty line)
5. severity of poverty (degree of inequality distribution below the food-poverty line)



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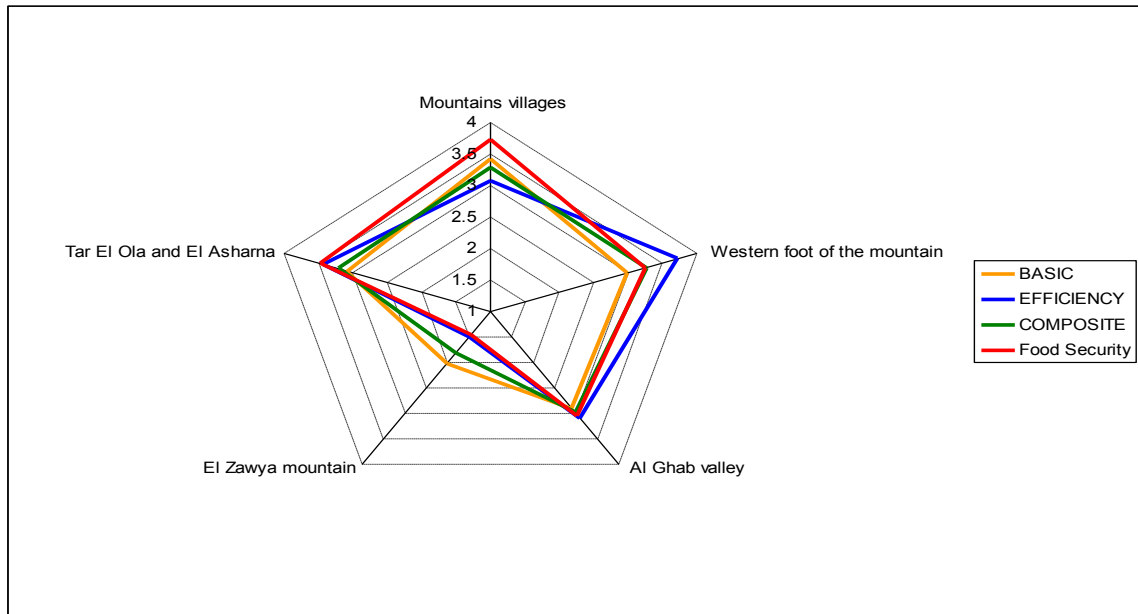
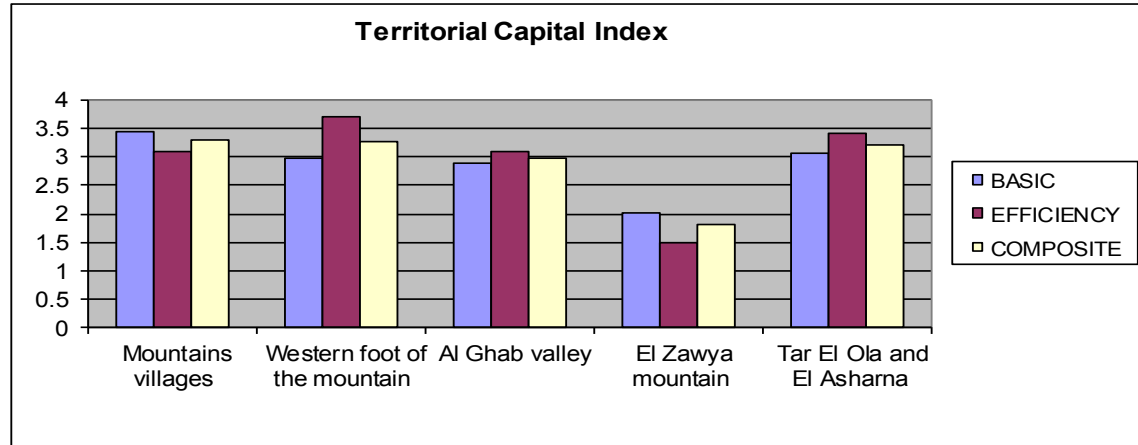
Characterizing the sub-areas by aggregated capital factors

1. Basic capital
2. Efficiency
3. Composite capital
4. FSN Index



Territorial Approach to FNS Policies and Strategies

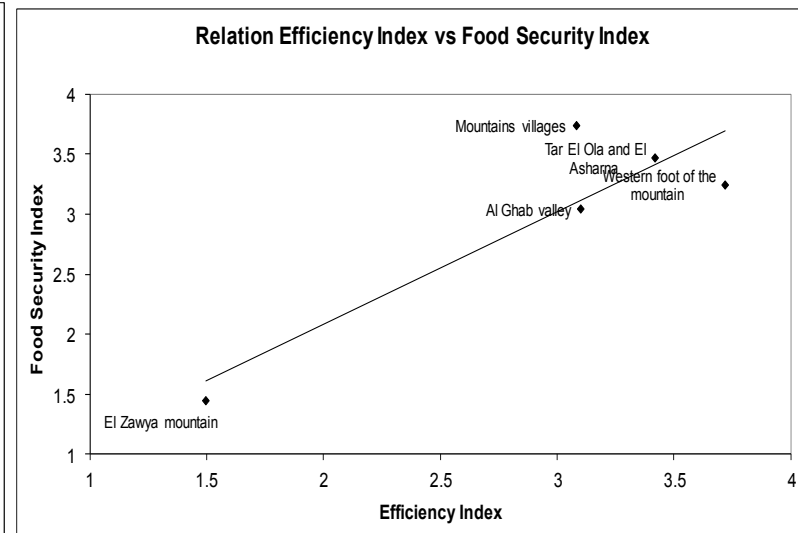
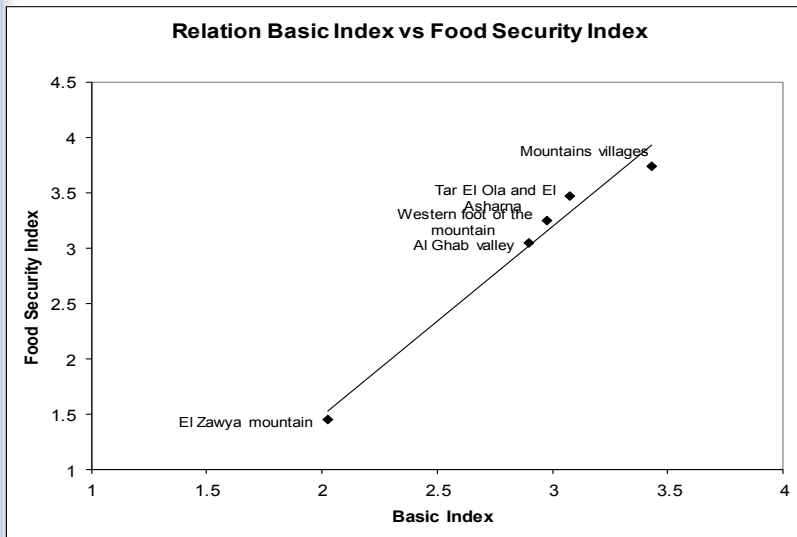
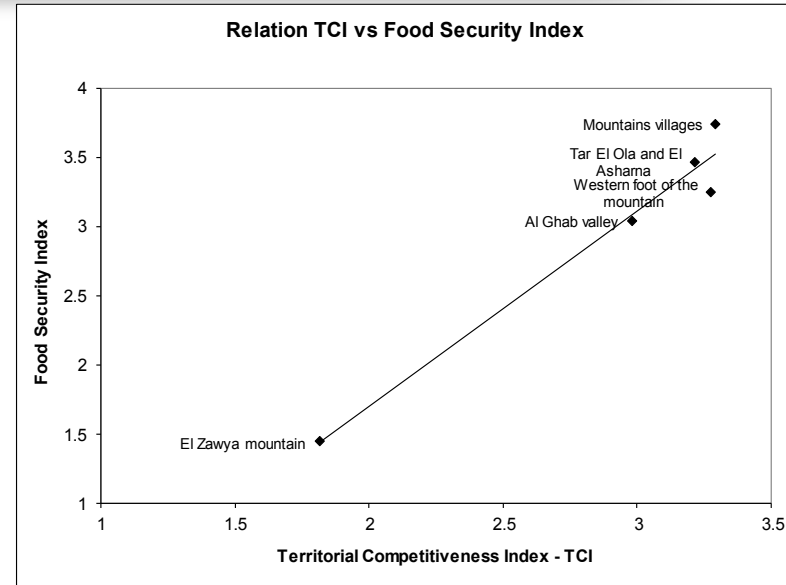
Results





Territorial Approach to FNS Policies and Strategies

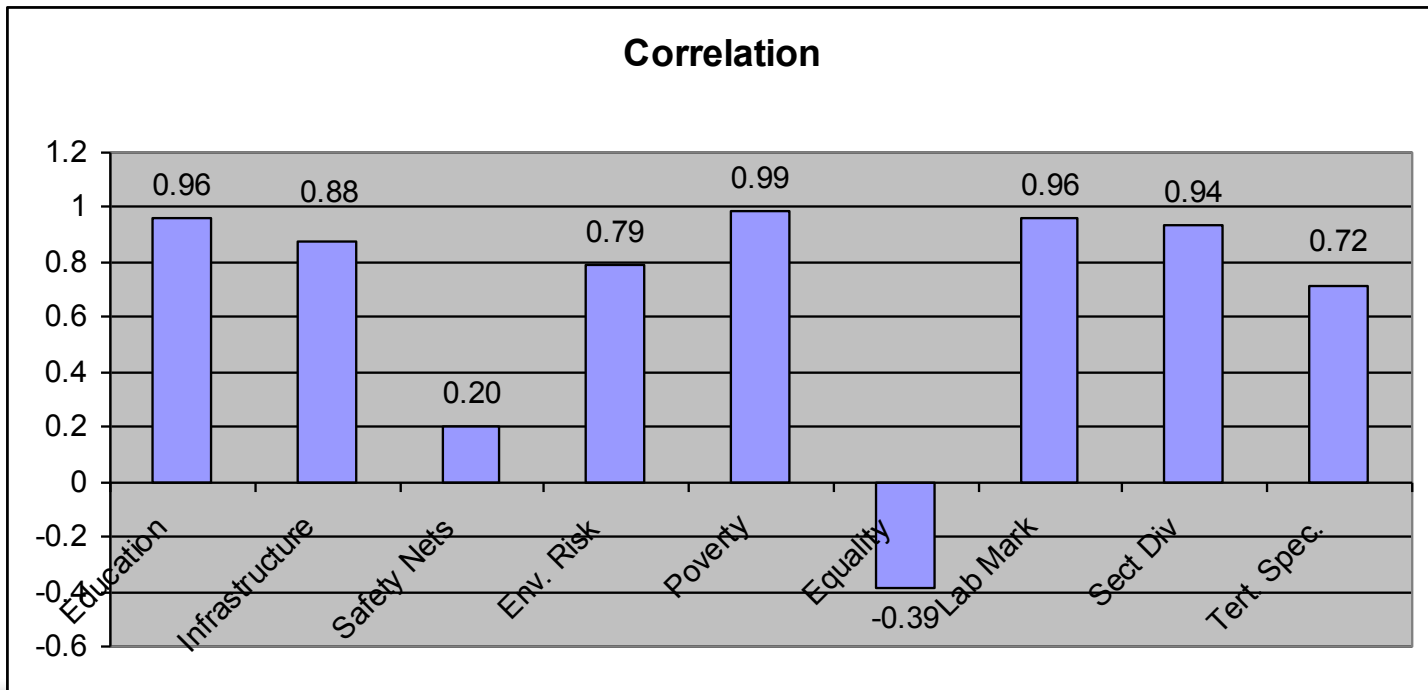
High correlation between TCI and FSN





Main drivers of FSN in Al Ghab

- Education
- Labour Market Efficiency
- Sectoral Diversification





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THANK YOU



Calculating Index in 5 steps: Recall Education Indicator

1. Education Indicator

- Share of people which are not illiterate
- Share of people with up to primary education
- Share of people with up to Secondary education
- Share of people with University or more



Calculating Index in 5 steps: Step 1

Collect data

Tab 1

Areas	Not Illiterate	Primary + Basic	Secon dary	Universi ty +
% of the population				
Mountains villages	91	42.4	10.7	2.3
Western foot of the mountain	89.6	38.7	12.4	4.1
Al Ghab valley	89.3	40.8	7.1	1.7
El Zawya mountain	87.2	14.6	1.3	0.4
Tar El Ola and El Asharna	92	42.1	9.7	2.8
Al Ghab	90.6	40.7	9	2.5





Calculating Index: Step 2

Calculate average and standard deviation of sub-area data by category

Tab 2

Average	89.82	35.72	8.24	2.26
SD	1.8253767	11.8960918	4.328741157	1.36491758



Calculating Index: Step 3

Calculate index by category and sub-area: (*% population-average of the sub-areas*)/SD

Tab 3

Areas	Not Illiterate	Primary +Secondary Basic	University +	
Mountains villages	0.65	0.56	0.57	0.03
Western foot of the mountain	-0.12	0.25	0.96	1.35
Al Ghab valley	-0.28	0.43	-0.26	-0.41
El Zawya mountain	-1.44	-1.78	-1.60	-1.36
Tar El Ola and El Asharna	1.19	0.54	0.34	0.40



Calculating Index: Step 4

Adjusting the data with a coefficient to turn negative values into positive (Coeff. 3)

Tab 4

Areas	Not Illiterate	Primary Basic	+Secondary	University +
Mountains villages	3.65	3.56	3.57	3.03
Western foot of the mountain	2.88	3.25	3.96	4.35
Al Ghab valley	2.72	3.43	2.74	2.59
El Zawya mountain	1.56	1.22	1.40	1.64
Tar El Ola and El Asharna	4.19	3.54	3.34	3.40



Calculating Index: Step 5

Calculating the geometric mean of the various categories by region

Tab 5

Areas	INDEX (Geog. Mean)
Mountains villages	3.442131028
Western foot of the mountain	3.563213056
Al Ghab valley	2.849671415
El Zawya mountain	1.446834098
Tar El Ola and El Asharna	3.600642595



Repeating the same exercise with the other Capitals

Tab 6



Areas	Education	Infrastructure and Dwelling	Social Safety Nets	Environmental Risk	Poverty	Inequality	Labour Market Efficiency	Sectorial Diversification	Business Sophistication	Food Security
Mountains villages	3.44	2.98	3.83	2.91	3.67	3.93	3.46	3.28	2.52	3.74
Western foot of the mountain	3.56	3.66	1.85	2.75	3.54	3.00	3.65	3.82	3.72	3.25
Al Ghab valley	2.85	3.36	3.57	3.03	2.99	1.89	3.04	2.99	3.25	3.04
El Zawya mountain	1.45	1.30	2.79	2.53	1.31	4.05	1.41	1.47	1.60	1.44
Tar El Ola and El Asharna	3.60	3.68	2.76	3.07	3.46	2.12	3.32	3.32	3.75	3.47
	BASIC						EFFICIENCY			Contr Variab



Repeating the same exercise with the other Capitals

Calculate the geometric mean across Capitals by sub-area

Tab 7

Areas	BASIC	EFFICIENCY		Food Security
Mountains villages	3.437762435	3.059004185		3.738203797
Western foot of the mountain	2.981385587	3.729719333		3.24767353
Al Ghab valley	2.892079896	3.090884763		3.043360302
El Zawya mountain	2.033871969	1.492383269		1.444457871
Tar El Ola and El Asharna	3.06232148	3.458473638		3.468226985





Run regressions on FSN by:

1. Single indicator
2. Composite indicator
3. Clusters of indicators (basic, efficiency)
4. Conclusion: Main FSN drivers in Al Ghab are
 - Poverty
 - Education
 - Labour market
 - Economic diversification