



SAHEL'S ECONOMIC CLUSTERS

An alternative for local development



SWEDD
(Sahel Women Empowerment & Demographic Dividend)

ECONOMIC CLUSTERS IN SWEDD COUNTRIES

An alternative to increasing social demand

The SWEDD Zone is characterized by a semi-arid warm climate with alternating dry / winter season, with relatively regular rainy seasons. Its population results from a strong ethnic mixing and is described by a very broad-based age pyramid and shrunken peak (3% are over 65 years old) similar to countries in phase two of demographic transition. The working-age population represents more than half of the total population. The population growth rate is around 3% between 2004 and 2014. The fertility rates recorded in the countries of the zone are for the most part higher than the world average (3 children per woman) and close to that of Africa. sub-Saharan (5 children on average per woman). Thus countries such as Niger, Chad, Mali, Côte d'Ivoire have fertility rates varying between 5 and 7 children per woman. The birth rate is much more pronounced in the rural areas of the area, where the use of contraceptive methods is lower compared to urban areas.

of economic development, is accompanied by an important phenomenon of migration from rural areas to urban areas of countries. Indeed, the spatial distribution of the population of the SWEDD zone highlights the preponderance of the rural population compared to urban population. In 2014, the urbanization rate was only 34.8% while the rural population accounted for 65.3% of the total population. The urban population of the area is continuously increasing with annual growth of 1.5% between 2004 and 2014.

Table 1: Spatial distribution of the SWEDD population

Countries	Total Population in %	Population Distribution in SWEDD Zone			
		2014		2014	
		Urban	Rural	Urban	Rural
Burkina Faso	19	20,7	79,3	29,0	71,0
Tchad	15	21,8	78,2	22,3	77,6
Côte d'Ivoire	24	46,2	53,8	53,5	46,5
Mali	18	31,3	68,7	39,1	60,8
Mauritania	4	52,4	47,6	59,2	40,7
Niger	20	16,6	83,41	18,5	81,5
SWEDD	100	29,9	70,1	34,7	65,2

Sources: Calculs CREG /CREFAT, from UN-Population Data

The urban area concentrates economic activities and attracts workers from rural areas in search of better job opportunities. This is the case of the SWEDD countries where capitals generally include the bulk of economic activities and therefore constitute areas of affluence.



The approach by the economic poles of growth is one of the most widely shared solutions for economic development benefiting the whole country. Indeed, the economic poles are generally defined according to the concentration of one or more economic activities in a space (region, municipalities ...) and the impact of these activities on the surrounding economies. It is particularly suitable for SWEDD countries in that the economy of its countries is characterized by a weak diversification of economic activities, the main activity being often concentrated in the traditional sector and is limited to the activities of the primary sector such as Agriculture, livestock, fishing and mining.

Spatial dynamics of the growing population

The population of the SWEDD area is approximately 93.5 million distributed among the six member countries. The process of urbanization, generally linked to the imperative



Thus in Chad, the city of N'Djamena, where the rate of urbanization is 100%, is the main attractive pole of the country. In Burkina Faso, the main centers of attraction of migrants are the Central regions and the Hauts-Bassins, which alone absorb 53.6% of internal migrants, ie more than half of the inflows. In Niger, the analysis of internal migration in 2001 according to backgrounds reveals that the main destination of migrants is the Urban Community of Niamey (capital) with 49.0% of internal migrants, it is followed by the region of Agadez which attracts 10.6% of the migrants because of deposits of exploitation of coal and uranium which it shelters. The situation is the same in Ivory Coast with Abidjan and Mali with Bamako.

Economic Growth and Sector Contribution: A Strong Agricultural Sector

The economy of the SWEDD zone is characterized by growth rates slightly above 5%. The economy is driven by Ivory Coast with a GDP of 35 billion USD which recorded two years of strong growth, with + 8.0% in 2014 and + 8.7% in 2013 and represents 35% of cumulative GDP of the West African Economic and Monetary Union (WAEMU) with GDP in 2014. At the sectoral level, Côte d'Ivoire is the world's largest cocoa producer (41% of world production) and the world's third largest producer of cocoa. coffee.



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These performances confirm the weight of the agricultural sector, which accounts for 28% of GDP (2014), provides about 75% of non-oil export earnings and occupies 46% of the active population (2012). The secondary sector, at 25% of GDP, mainly concerns crude oil refining, construction and agribusiness. The tertiary sector, 47% of GDP, is dominated by mobile telephony, banking and information and communication technologies. In general, the economic structure of the SWEDD countries shows the predominance of the primary sector.

Table 2 : Part of agriculture in the GDP of SWEDD countries

Countries	2000	2004	2009	2013
Burkina Faso	32,81	34,52	35,57	35,61
Chad	42,31	23,47	47,86	51,92
Côte d'Ivoire	24,99	23,59	21,20	20,98
Mali	35,89	33,66	35,14	39,84
Mauritania	36,68	35,53	25,78	19,71
Niger	37,84	20,12	39,21	35,80

Source : World Bank

Dynamics of employment: A strong impact on migratory phenomena

The spatial distribution of economic activities leads to a certain polarization of employment and migration phenomena. The urban environment is distinguished by the diversity of activities and job offers. On the other hand, in rural areas, agriculture is predominant in most SWEDD countries, which are also marked by a prominent informal sector. In Niger in 2011 (INS, 2014), this sector accounted for 68.8% of economic activity. In Mali, in terms of employment, the formal sector accounts for only 23% of total employment.

Immigration in particular is mainly the case of the ECOWAS countries: Burkina Faso (54.3%), Mali (18.1%), Guinea (5.5%) and Ghana (4.9%). (IOM, 2009). These are located in the forest areas where the export crop activities are concentrated.

In Burkina Faso, the main destination for labor migration on a continental scale is Côte d'Ivoire. In Côte d'Ivoire, the main destination countries for migrants are France (26%) and Burkina Faso (20%) (DRC¹, 2007). Migratory exchanges reflect differences in living standards between countries and economic opportunities

Spatial Dynamics of Human Capital

Human capital is an essential factor for economic growth and is therefore one of the primary concerns of social policy in SWEDD countries. The accumulation of knowledge is an essential element for initiating economic development in the context of globalization. The configuration of the education and health systems in the respective countries responds to the logic of the spatial dynamics of the population. For example, health and educational facilities are most concentrated in urban centers, to the detriment of rural areas.

¹ According to the Center's database on Migration, Globalization and Poverty (DRC) of the University of Sussex, in 2000, 1,578,695 Malians were registered abroad

This disparity in the spatial distribution of opportunities causes labor migration, but also migration for study purposes. In 2007, about 89% of Nigerians were studying in an African country (IOM, 2009). Most Burkinabe students study in Africa (62.8%), with a very high proportion located in the Maghreb countries. In Mali Malian students abroad are estimated at 10% of the total number of tertiary students between 2000 and 2006.

The SWEDD Zone : Two major clusters

The results of the delineation of the poles in the SWEDD zone made it possible to identify two main regional poles:

A. Cluster 1, consisting of the three countries of Burkina Faso, Mali and Cote d'Ivoire, with the latter as the epicenter, is characterized by an average GDP per capita of US \$ 1033 in 2014. The total population of Pole is estimated in 2014 at about 60 million inhabitants. The majority of the population of this center lives in rural areas except in Côte d'Ivoire, where the rate of urbanization is higher (53.479%).

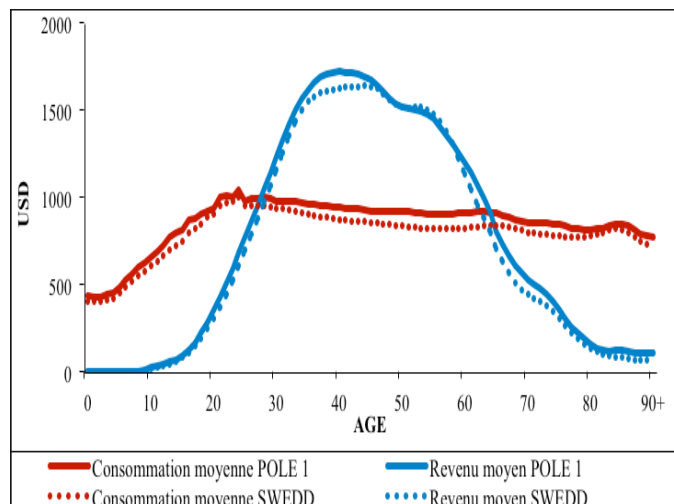
Contributions by sector show that most of the cluster's activities are concentrated in the agricultural and services sectors. The countries that make up this cluster are very dynamic in agriculture, the sectoral contribution of this sector varying between 21 and 40% of GDP in 2013

B. Cluster 2 is made up of Niger, Chad and Mauritania, with the latter as the epicenter. This cluster is characterized by a total population of 36 million inhabitants and an average GDP per capita of USD 928 in 2014. Internal migration is highly developed due to weather conditions and prolonged drought. The rate of urbanization is not as high as for pole 1. Like the other zone, most of their activities are concentrated in the primary sector

REGIONAL POLE 1 : Northern Zone

The graph below shows the average profile of consumption and labor income in the North Zone compared to the SWEDD profile. It highlights the surplus and deficit of the life cycle over the entire life cycle. On analysis, it appears that the average consumption in this zone is 436,1 USD at birth. She evolves positively until reaching 942,1 USD at the age of 20 years. On the age range 20-30 years, it oscillates between 942 and 1043 USD. Consumption decreases for those over 65 and stabilizes at the end of the cycle.

Graph 1 : Average consumption and income of Cluster 1 and SWEDD in 2014

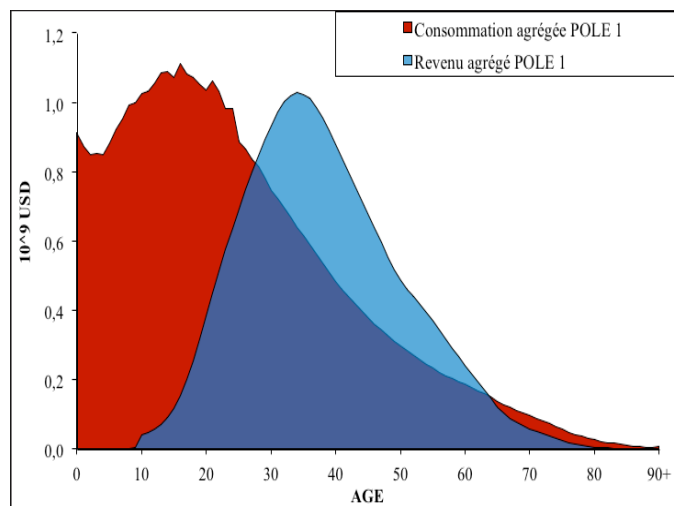


Source: CREG /CREFAT, 2017

As for labor income, it is zero until the age of six. So in the SWEDD zone, children aged 6-14 generate an average labor income of around \$ 28. Such statistics, however small, are alarming and contrary to child labor legislation. Beyond this age group, labor income is on an upward trend and reaches 1717,6 USD at the age of 40. It goes back down gradually and reaches a value of 105 USD for individuals aged 90 and over.

A cross-analysis of these two curves reveals that only individuals aged 28 to 63 years can generate a higher labor income than their own POLE 1 consumption. Which, in fact, shows a strong and long dependence on youth (0-27 years) and on old age (64+). The average youth deficit is estimated at \$ 529, while the old age deficit is \$ 505. It should be noted that the level of the deficit is higher for people between 0 and 18 years old (596 USD on average) and those aged 80 and over (704 USD on average). A result illustrating the vulnerability of the youngest and the oldest. Moreover, the surplus generated by 28-63 year olds, over this period varies between 40 and 775 USD.

Graph 2: Consumption and aggregate income of Cluster 1 and SWEDD in 2014



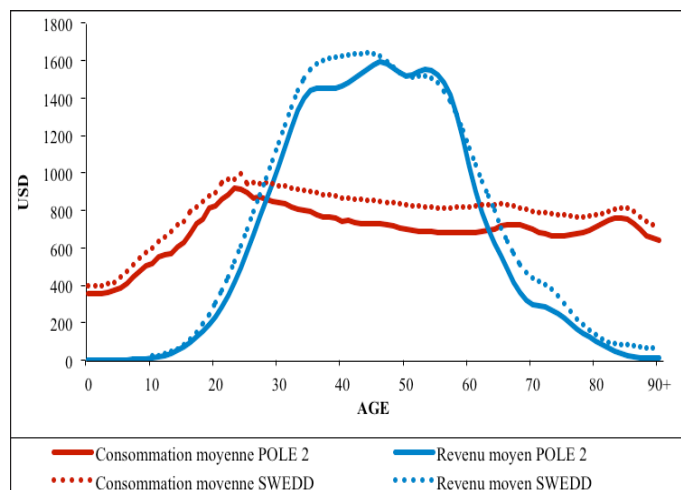
Source: CREG /CREFAT, 2017

At the aggregate level, consumption is 0.912 billion USD for individuals aged 0 years. It fluctuates and increases significantly in the 0 to 24 age group. It then declines for people aged 60 and up to reach \$ 0.006 billion for people aged 90 and over. Aggregate income does not exceed 1029 billion USD for all age groups. The deficit is observed for people between the ages of 0 and 27, and this aggregate deficit can be as high as about 912 billion USD. The aggregate deficit at the youth level is larger than that observed for the population aged 60 and over. As a result, aggregate LCD is more important for the youth population at \$ 21.276 billion versus \$ 0.567 billion for the population aged 64 and over. It is also important to note that in the North zone of SWEDD, the aggregate surplus is not high enough and can only really cover 62% of the deficit.

REGIONAL CLUSTER 2 : SOUTHERN ZONE

For the second pole of the SWEDD zone, the average consumption is around 358 USD at birth. It increases and reaches 917USD at 23 years old. It is less important for individuals aged 0 to 13 years. And in terms of labor income, it is almost zero for people aged 0 to 5 years. Then he believes according to the age and reaches his maximum at the age of 46 with 1591 USD. It is subsequently noted a decreasing variation for people aged 46 and over.

Graph 3 : Average consumption and income of Cluster 2 and SWEDD in 2014



Source: CREG /CREFAT, 2017

Moreover, with regard to life cycle deficit levels, it appears that only 29-63 year olds can generate an income capable of covering their consumption expenditure. This puts children and young people under 29 years old and adults over 63 in a position of dependency. This level of average deficit is even higher for people aged 80 and over where it averages 676 USD.

In general, in the southern part of SWEDD, individuals' life period or labor income exceeds their consumption over a total period of 35 years. The average surplus over this period of life is 629 USD a year. The average deficits for

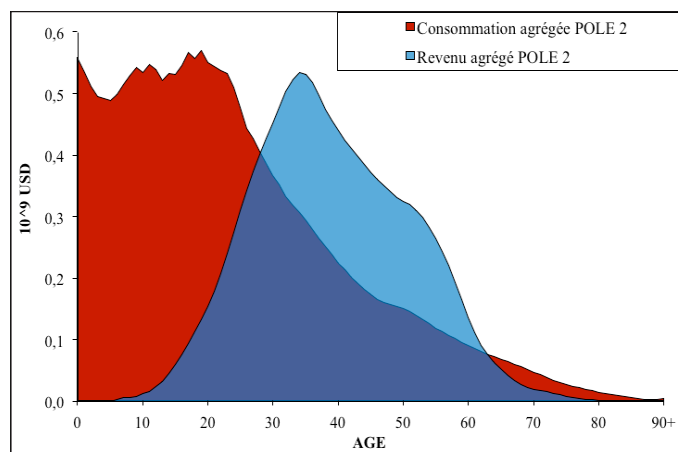
youth and old age are estimated in 2014 at 445 USD and 500 USD respectively.



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At the aggregate level, consumption is 558 Millions USD for individuals aged 0 years. It fluctuates and increases significantly in the 0 to 24 age group. It then gradually decreases for individuals aged 30 and up to reach 3 Millions USD billion for people aged 90 and over. Aggregate income does not exceed 518 Millions USD for all age groups. It is virtually nil for individuals aged 0 to 5 and those aged 80 and over.

Graph 4 : Aggregate Consumption and Income in Cluster 1 and SWEDD in 2014



Source: CREG /CREFAT, 2017

The aggregate deficit is observed for persons aged 0 to 27 and persons aged 64 and over. This aggregate deficit can be up to about 533 billion USD. The aggregate deficit at the youth level is larger than that observed for the population aged 60 and over. It is 11894 billion USD against 384 Millions USD for the population aged 64 and over. On the other hand, the surplus generated by the non-dependent populations is not, like pole 1, sufficient to cover deficits for youth and old age, which translates into a social demand estimated at 7 billion. USD in 2014, in the SWEDD area regional hub No.2.



Recommendations

The development of economic poles can be considered as a powerful tool to reduce economic disparities in the same area and to increase the pace of economic activity through the creation of wealth. It improves the business environment and increases the competitiveness of the pole sectors for economic and social development within the SWEDD area.

The analysis of the regional centers by the NTA methodology allowed to highlight several results. Indeed, the integration of the age dimension on the behavior of individuals in terms of consumption and labor income revealed differences in the situation of young people and adults, within the two delineated poles, with some disparities once marginal, sometimes notorious between the north and south zones. Indeed,

- The age of entry into the surplus period is 28 years in the north zone against 27 years in the southern zone and the surplus end age is estimated for both poles at 63 years;
- Average consumption is much higher in Zone 1 (854 vs. 692 USD). This trend follows that of the GDP per capita of the two zones, that of the northern zone driven by the relatively high level of consumption of Côte d'Ivoire;
- As income is a means of consumption, it is not surprising to see its tendency to follow that of consumption, in terms of comparison between the two regional poles;
- In contrast with the previous results, the aggregate deficit of zone 1 is far higher than that of zone 2 (22 against 12 billion USD). This translates into one of the disparities in social demand between these two zones (\$ 13 billion for zone 1 versus \$ 7 billion for zone 2);
- The existence of child labor is a characteristic of both zones. Indeed, in Poles 1 and 2, children begin to generate a labor income from, respectively, 7 and 6 years;

This comparative analysis calls for a number of recommendations. Indeed, it has become apparent that levels of dependency on youth and old age have become truly alarming for SWEDD countries. Social demand is becoming increasingly burdensome for families and the state, and it has become almost impossible for even independent individuals to empower themselves in the long term in such a context where transfers become unsustainable. In this respect, SWEDD countries should take advantage of the cluster approach to better exploit and benefit from the resources available to them through:

- a. Leverage short-term economies of scale to address occasional budget shortages;
- b. The unfolding of further cooperation initiatives to be much more attractive and much more competitive;
- c. The implementation of a more transversal approach of the territories finally to make play the complementarities rather than the competitions in the two poles SWEDD.

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