Synthesis of the impact evaluation literature in the eight countries of the west african economic and monetary union

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1. Background

The WACIE Program is a regional initiative that aims at promoting the institutionalization of evaluation in the governmental systems of the WAEMU countries. It is implemented by the International Initiative for Impact Evaluation (3ie) in partnership with the Government of the Republic of Benin and with the support of the Commission of West African Economic and Monetary Union (UEMOA), the West African Development Bank (BOAD) and the Hewlett Foundation. Program activities focus on capacity building in evaluation, producing high quality, conclusive, and rigorous data, and promoting evidence-informed decision-making.

The program was initiated following the results of a report on trends in Sub-Saharan Africa which revealed that the African continent is far from a strong involvement of countries and nationals although there is a growing trend of impact evaluation in the world. Indeed, despite the considerable increase noticed in terms of the number of evaluations since 2004 (77% from 2004 and later), there are still a number of significant disparities to consider. For example, impact evaluations in Africa are widely conducted in English-speaking countries (mainly Kenya followed by Uganda) compared to French-speaking countries (18%). Similarly, in recent years, exchanges with the main regional players, including the African Development Bank, the West African Development Bank and governments of Benin, Senegal, Niger and Guinea Bissau have indicated the existence of a real need for capacity building in the production of high quality research results and the promotion of their use in public policy making.

Therefore, the WACIE program aims at filling in some of these capacity gaps. However, it can only be effective if it responds to the real needs of the countries of the region. In this respect, it has proved necessary to carry out an inventory of existing evaluation capacities in the region, through an exploratory study that takes into account a literature review. The main objective of the literature review is to take stock of impact evaluations in the eight WAEMU countries through the literature. Specifically, this involves taking stock of impact evaluations and systematic reviews; data extraction and analysis of studies content; mapping the main stakeholders in impact evaluation in the region and by country and assessing the needs of stakeholders for rigorous impact evaluation and systematic reviews.

The exploratory study includes in a broader sense, a synthesis of the impact evaluation literature, a stakeholder mapping and a stakeholder needs assessment for evaluation in WAEMU countries. This report presents the results of the literature review.

2. Methodology of the synthesis of the impact evaluation literature

The synthesis of the impact evaluation literature has used systematic research methods to ensure a representative capture of the research carried out in the eight WAEMU countries. Research parameters were used to help identify key areas supported by evidence from impact evaluations, as well as areas for which insufficient factual data is lacking.
2.1. Research parameters

In this study, the impact evaluation was considered as "an analysis that measures the net evolution of the outcomes of a group of people who can be assigned to a specific program by using the best methodology available, workable and appropriate to the research question being assessed. »4 We used the inclusion or exclusion criteria of impact evaluations or systematic reviews according to the PICOS criteria.

- **Period**: 1990 to 2018;
- **Population**: WAEMU countries (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Togo, Senegal);
- **Intervention** in any sector;
- **Comparators**: Treatment with alternative treatment or no treatment, or without comparison groups;
- **Study Methodology**: Experimental, quasi-experimental method or systematic review.

2.2. Importing and filtering references

Once researches were completed, references of twenty-two thousand seven hundred and ten (22710) studies were imported into the Eppi-Reviewer software. The filtering of these references was carried out in several stages using the Eppi Reviewer software:

- Filtering duplicates on the basis of titles to obtain nineteen thousand nine hundred and fifty-five (19955) references;
- Filtering by reading the titles and summaries that results in five hundred forty-nine (549) papers;
- Reduction of references to one hundred and forty-five (145) references based on titles and methodology.

2.3. Data extraction

Data extraction is summarized in two main steps:

- Classification of studies by country, sector, and type of methodology (experimental or not).
- In-depth reading of the one hundred and forty-five (145) papers that meet the criteria and extraction of data relating to the outcome variables, the use of qualitative or non-qualitative data (mixed approach), the conducting of analysis by gender, the funding institution of the study, the involvement of African researchers or not, etc.
3. Results/Outcomes

3.1. Mapping Impact Evaluation in WAEMU Countries: Global Statistics

Knowing the exact number of impact evaluation in the field of development is a complex and rather difficult exercise, as assessments are produced by various institutions and there is no mechanism for automatically recording impact assessments conducted around the world and more specifically in WAEMU countries. In this section of the report, the purpose is to present a detailed view of the characteristics and results of impact assessments carried out in the WAEMU countries from 1990 to 2018, which are recorded through the methodology described above. For this purpose, one hundred and forty-five (145) impact assessments, meeting the above criteria, were inventoried and taken into account in this study. Table 2 below presents some global statistics on the impact evaluations included in this study. We notice that not all impact evaluation articles have information on authors, evaluation funding institutions and/or programs that have been the subject of evaluation, etc.

Table 1: Distribution of the characteristics of the impact evaluation studies listed in this report

<table>
<thead>
<tr>
<th>Characteristics of Studies</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of impact evaluation inventoried</td>
<td>145</td>
</tr>
<tr>
<td>Total number of impact evaluations with author information</td>
<td>142</td>
</tr>
<tr>
<td>Total number of impact evaluations with at least one African author</td>
<td>73</td>
</tr>
<tr>
<td>Total number of impact evaluations with information on the organizations or institutions that conducted the programs or projects subjected to evaluation</td>
<td>39</td>
</tr>
<tr>
<td>Total number of impact evaluations with information on the organizations or institutions that conducted the evaluation</td>
<td>19</td>
</tr>
<tr>
<td>Total number of impact evaluations with information on the organizations or institutions that funded the programs or projects subjected to evaluation</td>
<td>22</td>
</tr>
<tr>
<td>Total number of impact evaluations with information on the organizations or institutions that funded the evaluation</td>
<td>61</td>
</tr>
</tbody>
</table>

3.2. Dynamics in the conducting and publication of impact evaluations in WAEMU: From 1990 to 2018

The dynamics of conducting and publishing impact evaluations in the development sector at the WAEMU country level shows a growing global trend over the period from 1990 to 2018 as shown in Figure 1 below. For this purpose, two interesting data are presented, that are the distribution over time of all impact evaluation studies, and the involvement of at least one African author in these studies. From 1990 until 2008, there appears to be an almost total absence of such studies in WAEMU countries. This period, which also coincides with the beginning of the era of democracy in these countries, could explain what is observed. Indeed the year 2008 marks the end of an era and from 2009 we notice what looks like a new dawn, a relative boom of rigorous impact evaluations that have been published from 2009. The global trend thus remained growing despite some year of change. Although causality is not established between the democratic experience of the countries of the space and the number of impact assessments conducted, it is worth noting that all the countries of the space already had more than a decade of democratic experience with multi-party system in the years 2009, with a civil society more and more present. Also, we notice the continued implementation of structural adjustment programs in...
economic area, the devaluation of the CFA currency, as well as the implementation of poverty reduction efforts.

The analysis of Figure 1 also suggests that despite the adoption of the Millennium Development Goals (MDGs) agenda at international level in 2000, which focuses on reducing poverty by targeting eight social objectives, there has been a slight upward momentum in the number of impact evaluations in WAEMU countries up to 2009. The presumed causes of this trend remain unclear considering the macro environment that lent itself to it however.

Figure 1: Evolution of impact evaluations from 1990 to 2018

The expansion of impact evaluations in the development sector in French-speaking West Africa began in the years 2009, when there is a considerable increase in the number of impact evaluations conducted in WAEMU countries. This dynamics was maintained virtually over the decade from 2008 to 2018 with a spike in 2017 where the number of impact assessment studies published that year reached 28 studies. This could also be related to the end of the MDGs, although this link is not formally established. Indeed, with the end of the period set for achieving the MDGs, several impact assessments were conducted to measure the achievement of these objectives.

Moreover, the expansion of impact evaluations in the development sector that began at the end of 2008 could be explained by a shock at both supply and demand levels for impact evaluations.

As far as demand is concerned, the advent of the MDGs in 2000 was accompanied by several international resolutions with the Paris Declaration on Aid Effectiveness, the Accra Plan, and many other initiatives and similar decisions. All this has certainly fostered awareness of the need for accountability and results-based management at both country and partners levels. As a result, partners and later countries have shown growing interest in the effects and impacts of development programs.

In terms of supply, researchers have developed methodologies that can estimate the impact attributable to a development project. This was also accompanied by the setting up and development of a research, development initiative and capacity building centers such as the African School of Economics, Partnership for Economic Policy, JPAL, IPA, Partnership for African Social and Governance Research, etc., which intervene in some WAEMU countries or involve WAEMU staff in their works. A third
element that has promoted the expansion of impact evaluations in development area has been the creation and setting up of evaluation funding institutions. One example is the creation of 3ie in 2008, one of whose primary missions is the funding of impact evaluations. It has also been noticed the creation of evaluation departments in several development funding institutions and bilateral and multilateral cooperation agencies, such as the West African Development Bank (WADB), the WAEMU Commission, the African Development Bank, USAID, etc. All these elements contributed to the remarkable progress of impact evaluations in the development sector observed from 2009 at the international level and in WAEMU countries as well.

Regarding the presence of African authors in impact evaluations studies in francophone Africa, it has evolved in a similar way to the dynamics of impact evaluations in the region. The expansion and emergence of impact assessment as an academic subject in the development sector has raised the interest of African researchers who have shown increasing interest in the practice of impact assessment. The same is true for students who are increasingly interested and major in the field. Thus, while most impact evaluations were conducted by non-African researchers, we note that after 2008, African researchers began to be involved in impact evaluations. In 2009, for example, 100% of the evaluations listed have at least one African author even though this trend has not been maintained over time, the fact remains that there is a better visibility of the involvement of African researchers in impact assessment research. In addition, the creation of training in impact assessment techniques in the region also fostered the observed dynamics. Examples include the creation in Benin in 2006 of the Institute for Empirical Research in Political Economics (IREEP) and the School of Economics of Africa (ASE) in Benin, which has trained many young researchers in impact evaluation. The latter also participate in the work in WAEMU countries. It should also be added that impact assessment methodologies have evolved over time and mixed methodologies are being promoted and encouraged more and more in order to have elements that can explain the failures and successes of development programs, advance the theoretical bases that underlie the design of development projects and programs, as well as theories relating to the operation and implementation of these projects according to the contexts. For this purpose, impact assessment teams are increasingly extended to sociologists, anthropologists and other social science experts in order to comprehend the intricacies that govern the functioning of community systems in place and that are not necessarily well understood by quantitative procedures.

3.3. How is the impact assessment publications distributed by country in the WAEMU area?

The distribution of impact evaluations carried out in the field of development between WAEMU countries shows a rather marked inequality as illustrated in Figure 2. Four groups of countries emerge from the analysis of the graph. Burkina Faso alone forms the first group with 46 impact assessments carried out in the period. It is followed by a trio composed of Senegal, Mali and Niger with respectively 26, 24 and 21 impact assessments. The third group of countries is made up of Benin and Côte d'Ivoire with respectively 14 and 12 evaluations, while the last group is formed by Togo and Guinea Bissau, each of which has 4 impact assessment publications.

These results indicate that although the practice of impact evaluation in Francophone Africa remains weak compared to other regions, the dynamics within the WAEMU countries is rather heterogeneous and efforts must be made according to the realities of each country. For this purpose, some countries like Burkina Faso seem to have a more advanced practice of conducting impact evaluation compared to other countries in the region. To this end, a sharing of experience between countries could make it possible to learn from Burkina's experience and to establish a new dynamic in the region. However, this
The graph does not provide information on the players who promote these studies, namely, are these efforts of the government or rather the consequence of mechanisms set up by the technical and financial partners, the academics, or civil society organizations. It should also be noted that countries like Guinea Bissau have conducted many impact assessments in the medical field with several studies that have used rigorous impact assessment methods to test the effectiveness of vaccines, medicines, etc. These evaluations were not taken into account in this study due to the concentration of the literature review on projects and development program in a broad sense.

Figure 2: Number of impact assessment studies carried out in WAEMU countries (1990 to 2018)

Figure 3 shows the concentration of impact assessments carried out by sector in the area of development in UEMOA countries. The sector analysis of the 145 impact evaluations listed in this study shows a diversification of sectors and/or themes covered by impact assessments. There are 11 sectors in total, of which six (6) cover about 75% of the assessments conducted in the sub-region. These include health, economics and financial, communication, agriculture, education and nutrition sectors.

Despite environmental and climate change issues, it is noted that few regularly published impact assessments have been conducted in this sector in the sub-region. The same is true for water, sanitation and hygiene sector where many development programs are funded and implemented in WAEMU countries, and are subject to evaluation in the sense of monitoring of indicators and efficiency but not in terms of impact assessment. This indicates a lack of knowledge and conclusive elements on the determinants of success and failures of development programs in these sectors. This gap could, however, be explained by the methodological constraints peculiar to impact assessment, which may turn out to be important for interventions in this sector, given the socio-political and economic context of the countries of the area.
An analysis of the typology of impact assessments by sector also indicates a sector diversification observed at the countries level as shown in Figure 4. To this end, we note that, apart from Togo and Guinea Bissau, which have little impact assessment (4 in total), the impact assessments carried out in other WAEMU countries cover a minimum of 6 sectors in each country. It is therefore noted that the predominance of six sectors such as health, economy and finance, communication, agriculture, education and nutrition, at the regional level is also observed at the countries level.
3.4. Funding of impact evaluations: Introduction of technical and financial partners

As part of this study, the analysis of the funding of impact assessments in WAEMU countries, illustrated in Figure 5, shows us that the main institutions that finance impact assessments in the field of development, are bilateral cooperation agencies such as USAID, UKAID, MCC, AFD, etc. They are followed by multilateral cooperation agencies (World Bank, European Commission, WHO, ILO), international foundations (Bill & Melinda GATE, German Research Foundation, Swiss National Science Fund), research institutions (IFPRI, IRD, IZA, IDRC, NBER), and international NGOs (3ie, PEP). Among these institutions, bilateral cooperation, international foundations and multilateral cooperation are the ones that have funded the most impact assessments in the WAEMU area with respectively 25%, 19% and 18% of the financed evaluations. It should be noted that these statistics do not highlight certain evaluations funded by several institutions at the same time.

On reading the results, we note here the absence of WAEMU governments in the financing of impact evaluations as well as those of the development funding institutions of the sub-region such as WADB, EBID and ADB in funding impact assessments. These institutions play a major role in financing development programs in the region as well as national governments. It could be speculated that other forms of evaluation obscure the impact assessment at the level of these institutions, all of which have evaluation departments as well as the governments of the countries. Impact evaluation being often perceived as too expensive, which lasts much longer compared to other forms of evaluation including process evaluations, and above all it is technically demanding. In such cases, advocacy for impact assessment should be made to the countries governments and development funding institutions of WAEMU.

However, it should be noted that most WAEMU countries participate in bilateral cooperation in funding and conducting impact assessments initiated by development partners.

Figure 5: Breakdown of funding sources for impact evaluations in WAEMU countries

![Breakdown of funding sources for impact evaluations in WAEMU countries](image)

3.5. Implementation of impact evaluations

The conduct of impact evaluations carried out in the field of development in WAEMU countries, reveals several players. Graph N° below presents the different categories of players who conducted impact assessments in WAEMU countries. We notice that the evaluations were conducted for 64% by research institutes (IFPRI, IZA, IPA, ISSER, etc.), 27% by the World Bank and 9% by international NGOs.
Concerning research institutes, the fact is that most are based outside the African continent although more than half of the impact assessments listed have at least one African author. This seems to reflect an affiliation of African and non-African authors to research institutes based outside the African continent.

As far as research institutions based in Africa are concerned (universities, think-tanks), they do not appear as the main authors of impact assessment publications. It could be inferred that their role is more visible in contributing to the design of impact evaluations as well as in the design of series tools and the collection of data itself. Capacity building to publish thus comes up as a major track suggested by these results.

**Figure 6: Breakdown of impact evaluations by type of development organization**

![Pie chart showing the breakdown of impact evaluations by type of development organization: Research Institute 64%, World Bank 27%, International NGO 9%](image)

3.6. Presentation of evaluations by type of methodologies

Impact evaluations mainly differ by their methodological rigors in estimating the impact caused by an intervention and which is exclusively attributable to it. In WAEMU countries, with reference to the population represented by the publications listed in this study, it is noted from Figure 7 that 53% of the impact assessments listed used experimental approaches (Randomized Controlled Essays) while 37% used quasi-experimental approaches (pairing, double difference, discontinuous regression, instrumental variables, etc.). 10% were devoted to systematic review (synthesis of research results on a theme). We note that despite the complexity of their implementation, Randomized Controlled Essays are the most widely used approaches in the region in terms of impact assessment. This indicates that the region lends itself well to rigor in the methodological approach and an effort to design impact assessments as soon as the development projects / programs are implemented is done through the constitution of processing and monitoring groups, as well as the conducting of reference studies. Therefore, these efforts should be encouraged and enhanced for the production of quality and conclusive data and the promotion of the incorporation of the results of this research into the formulation of public policies.
3.7. Sector analysis of impact assessments

In the development sector, outcome variables are indicators through which the effects and / or impacts of a development project or program are measured and assessed. Very often, in the search for impact, researchers take an interest in several outcome variables in relation to the objectives of the project that is subjected to evaluation. The outcome variables are then chosen primarily in the intervention sector but also in related sectors likely to be affected by the intervention.

Figure 9 shows the different sectors that are covered by the set of outcome variables that were analyzed in the assessments identified in this study. Thus, 10 sectors were covered by the set of outcome variables. This indicates that the impact evaluations carried out in the sub-region focused mainly on the effects and impacts of development programs in these sectors. To a certain extent, this adds to the fact that there is sector diversity in the knowledge and evidence generated from the impact evaluation studies of development projects and programs in the sub-region.

Figure 9: Breakdown of outcome variables by sectors
With a close look, more than a third of the outcome variables drawn from the assessed interventions come from the health and agriculture sectors, more than half of these variables come from the sectors of health, agriculture and education. The combinations of health, agriculture and education, and household welfare and nutrition sectors absorb more than 75% of the outcome variables studied. It follows that these sectors are the most explored by researchers in terms of the impact of development programs.

In light of these analysis results, there is therefore little analysis done by researchers on the impacts of interventions in the sectors of migration (0%), communication (0%), employment (2%), governance (3%), environment (4%) and gender (6%), in particular by taking into account the variables of interest related to these sectors. This tells us that in the sub-region there is very little evidence on the effects and impacts of development policies in these sectors. It therefore seems necessary to work to fill in this information gap with regard to the importance of these sectors for development policies.

By looking at the outcome variables used in the listed evaluations in this work, Table 3 shows by sector the groups of outcome variables used with weight. Thus, we note that the most used outcome variables in health sector relate to health status indicators (28.81%). In the agricultural sector, these are indicators on agricultural production (24.44%). Regarding education, we have indicators relating to enrollment and school attendance (52.27%), while as for household welfare we have indicators relating to consumption expenditure (37.2%). The nutrition sector concentrates anthropometric measures (43.33%) while in the employment sector we have indicators on unemployment and child labor (80%). As far as economy and finances are concerned, we have indicators on the starting and performance of companies that concentrate 65.22% while in the gender sector, indicators on gender-based violence cover some 56.25%. Regarding governance, indicators on the voting behavior of citizens widely dominate with 62.5%; and in the environmental sector, indicators for wood use dominate research and account for about 75%.

4. Discussion

With reference to the outcome of the various primary data analyzes collected from the impact assessment and systematic review publications in the eight WAEMU countries, it appears that there is clearly a gap between the countries and this requires to be taken into account. Thus, by trying out a typology, it can be said that in Togo and Guinea-Bissau the needs are relatively greater in order to conduct and publish impact assessment works. Following these two countries with similar needs, Benin and Côte d’Ivoire could be grouped together, which also have considerable needs for the conducting and publication of impact assessments. In Niger, Mali and Senegal, although impact evaluations are conducted, governments in these countries need to invest more in order to fund, sponsor and take into account the studies outcome. In Burkina Faso, there is a better experience of conducting impact assessment studies. However, these works are supported by development partners and therefore the efforts expected of the government remain similar to those of countries like Senegal, Mali and Niger in relative terms.
At sector level, there is little evaluation and outcome variables in the environment and climate change, water - sanitation and hygiene sectors. Given the fact that several projects exist in these key sectors for the sub-region, there is no doubt that efforts are needed to conduct further impact assessments to assist in the formulation of effective policies for the countries and region.

As far as development and capacity building of the players are concerned, these axes concern both the capacities to lead and the capacities to access and use the results of research in impact evaluation. But it seems even more important to insist on a relatively silent component, the effects of which are quite great in the sub region. These include capacity building in publishing and writing impact evaluation study articles and this should go towards research institutes in the sub-region, researchers, consultants who are involved in those assessment works. This could include consideration of sponsorship schemes for publication, scholarship opportunities to encourage and facilitate the publication of articles or any other form of incentive to the publication of impact assessment research.

**Conclusion and recommendations**

Impact evaluations have multiplied in the field of development since the beginning of the 2000s around the world but also in the French-speaking countries of West Africa, although in a very heterogeneous way according to the countries. This new dynamic in development economics has accompanied efforts initiated at international level to combat poverty with the advent of the Millennium Development Goals (MDGs) and at national level by the countries. Impact assessments have provided partners, governments and other development players with evidence on the effects and impacts of development programs in critical sectors.

The synthesis of the impact assessment literature has provided information on the dynamics of impact assessment in WAEMU countries. She highlighted the disparities between countries and between sectors. The participation of African researchers in impact assessments as well as other aspects such as the agencies or institutions that funded the impact evaluations and those who implemented the projects / programs being evaluated were also explored in this study. Based on the results of this study, the following recommendations were made:

- to ensure the sharing of experience between countries in order to foster a dynamic of peer learning within the WAEMU countries;

- encourage impact assessments in the environment and climate change sectors;

- Advocate for funding or contribution to the financing of impact assessments by the governments of countries and development funding institutions of WAEMU;

- build the publication capacities of players who produce impact assessments in WAEMU countries;

- promote the production of quality conclusive data and their use in the formulation of public policies;

- ensure the formulation of research questions on the migration, communication, employment, governance, environment, and gender sectors in the impact assessments initiated by the WACIE program in WAEMU countries.