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International cooperation in support of Benin's circular economy transition: Partnerships, financing and limitations

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Abstract

This article critically examines how international cooperation supports Benin's transition towards a circular economy, with a particular focus on partnerships, funding mechanisms, and institutional, strategic, and operational constraints. Drawing on a qualitative research design combining literature review, project and policy document analysis, semi-structured interviews, and comparative case studies, the paper shows that international cooperation has helped mainstream circular economy ideas, produce strategic frameworks (including the National Circular Economy Action Plan), and stimulate local experimentation especially in the solid waste sector. However, these contributions remain limited by fragmented interventions, short project cycles, weak cross-sector coordination, and sustained dependence on external funding, which collectively undermine long-term institutionalization and territorial anchoring. The transfer of standardized models with insufficient contextual adaptation, alongside the persistent marginalization of informal waste actors, further constrains scalability and inclusiveness. The article argues for a shift from a project-based approach to a systemic and place-based cooperation model that prioritizes co-design with local stakeholders, recognition and integration of informal actors, long-term financing instruments, and learning-oriented monitoring and evaluation, as conditions for a genuinely transformative circular transition in Benin.

Keywords: Circular economy; International cooperation; Governance; Waste management; Development finance; Informality; Benin

1. Introduction

In the context of increasing pressure on natural resources, ecosystem degradation, and the growing accumulation of waste, the circular economy is progressively emerging as an alternative paradigm to the dominant linear model based on resource extraction, consumption, and disposal (Niang, 2021). By prioritizing waste reduction, reuse, recycling, repair, and eco-design, this approach seeks to reconcile economic performance, social equity, and environmental sustainability. Initially conceptualized within advanced industrial contexts, the circular economy is now attracting growing interest in countries of the Global South, where challenges related to resource access, waste management, and job creation make its implementation particularly strategic.

In Benin, the circular economy is gradually emerging in political discourse, development programs, and certain entrepreneurial initiatives, although it remains weakly institutionalized. The waste management sector, particularly urban solid waste, illustrates these tensions (Behanzin, 2026): rapid urbanization, limited technical capacity among local authorities, underdeveloped industrial recovery sectors, and the persistent marginalization of the informal sector. Since 2018, the Beninese government has initiated a structural reform through the creation of the Waste Management and Sanitation Company (SGDS SA), tasked with structuring and professionalizing the integrated management of

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household waste, initially in major urban centers. This reform reflects a commitment to modernizing the sanitation sector and may provide an operational foundation for scaling up circular practices.

Alongside this public-sector restructuring, Benin has witnessed renewed interest from private and entrepreneurial actors attracted by the economic potential of waste valorization. Recycling and transformation initiatives are emerging, supported by bank financing and development funding, contributing to value creation, reduction of residual waste volumes, and the emergence of new markets. This momentum has been reinforced by the recent development of a National Action Plan for the Circular Economy, supported by the African Development Bank, which identifies several priority sectors with strong circular potential, including waste, plastics, agriculture, construction, and transport. This roadmap marks an important milestone in the political recognition of the circular economy as a lever for socio-economic transformation.

However, this momentum remains fragile, unevenly distributed, and constrained by numerous structural challenges: insufficient local capacity in circular project design and management, weak regulatory frameworks, limited access to dedicated financing, and inadequate coordination among stakeholders. In this context, international cooperation appears as a central lever for supporting Benin's circular transition. It operates through a diversity of interventions, including technical assistance, project financing, technology transfer, capacity building, and multi-stakeholder platforms, implemented by bilateral agencies, multilateral institutions, NGOs, and international foundations.

While these interventions have, in some cases, stimulated innovation and supported the structuring of emerging value chains, they also raise important questions. Fragmented actions, limited donor coordination, the importation of models poorly adapted to local realities, dependence on external financing, and insufficient national ownership often constrain their capacity to generate durable structural transformation. These limitations call into question the actual impact of international cooperation in a process that requires strong territorial anchoring, co-construction with local stakeholders, and adaptation to the country's social, economic, and cultural dynamics.

Accordingly, the central research question guiding this article is: to what extent does international cooperation effectively contribute to the transition toward a circular economy in Benin, and what are its main institutional, strategic, and operational limitations? The analysis seeks to assess whether cooperation mechanisms can move beyond a project-based logic to support a sustainable, inclusive, and context-sensitive circular transition.

To address this question, the article aims to analyze the main modalities through which international cooperation intervenes in the field of the circular economy in Benin, evaluate their effects on public policies, economic value chains, and territorial dynamics, identify the structural constraints encountered, and propose avenues for improvement to strengthen coherence, sustainability, and local ownership of cooperation initiatives.

2. Methodological Approach and Analytical Framework

This study adopts a qualitative approach aimed at critically analyzing the contribution of international cooperation to the transition toward a circular economy in Benin, as well as the structural limitations of its intervention modalities. The methodological design is based on source triangulation, combining an in-depth review of the scientific literature, analysis of institutional and project documents, semi-structured interviews, and empirical case studies. The literature review focused on scholarship related to the circular economy, socio-technical transitions, waste management in countries of the Global South, and critical approaches to international cooperation. It was complemented by the examination of a documentary corpus consisting of national strategies, action plans, project reports, policy briefs, evaluations, and technical notes produced by public institutions, technical and financial partners, and civil society organizations, primarily from recent years in order to capture current dynamics of the circular transition in Benin.

The empirical component draws on semi-structured interviews conducted with key stakeholders (36 in total) involved in the design, implementation, or support of circular economy and waste management initiatives. These included representatives of national and local administrations, technical and financial partners, civil society organizations, entrepreneurs, and, in some cases, actors from the informal sector. A purposive sampling strategy was employed to capture the diversity of institutional positions and roles within circular value chains. Data from interviews, documents, and case studies were subjected to thematic analysis structured around an analytical grid inspired by evaluation criteria commonly used in development policies and environmental projects, namely relevance, coherence, local ownership, and sustainability. This approach made it possible to identify patterns, convergences, and tensions between the stated objectives of cooperation interventions and their concrete effects on territorial and sectoral dynamics. Source triangulation was used to strengthen the analytical validity of the findings while acknowledging the inherent limitations of qualitative research, particularly regarding statistical generalization and the assessment of long-term effects.

3. Rethinking the Circular Economy through the Lens of International Cooperation

3.1. The Circular Economy as a Transformative Project in the Global South

The circular economy was initially conceptualized as a systemic response to the ecological and economic limits of the linear model of production and consumption (Geissdoerfer et al., 2017). It is grounded in principles aimed at maintaining the value of resources, materials, and products within the economy for as long as possible while reducing environmental impacts. However, these principles have largely been formulated based on experiences from advanced industrial contexts characterized by strong technological and institutional capacities.

In countries of the Global South, and particularly in sub-Saharan Africa, the circular economy takes on a different meaning. It unfolds in contexts marked by strong structural constraints: limited access to infrastructure, dominant economic informality, weak industrial capacity, and growing demographic pressure (Kirchherr, Reike & Hekkert, 2017). Under these conditions, circularity cannot be conceived solely as a technological innovation but must be understood as a profound socio-economic transformation.

Several authors emphasize that societies in the Global South have long practiced empirical forms of circularity through repair, reuse, and informal waste valorization (Ikponmwosa et al., 2024). Often carried out by marginalized actors, these practices contribute to household economic resilience and waste reduction, yet they remain largely unrecognized in public policies and formal development frameworks.

The transfer of "*turnkey*" circular economy models designed in the Global North therefore raises serious issues of contextual adequacy. Murray, Skene, and Haynes (2017) argue that the circular economy is not a universal model but an evolving framework that must be contextualized. Without such contextualization, circular projects risk producing limited or even counterproductive, effects, reinforcing inequalities or excluding informal actors.

From this perspective, the circular economy in the Global South should be understood as a political and territorial project involving a reconfiguration of relationships between actors, resources, and institutions (Niang, Bourdin & Torre, 2020). It requires recognition of endogenous practices, articulation between formal and informal systems, and multi-level governance capable of integrating local dynamics into a national vision of sustainable transformation.

3.2. International Cooperation: Between Structural Support and Normative Pressures

International cooperation has historically constituted a central pillar in financing and supporting public policies in developing countries. It has been structured through various instruments (official development assistance, concessional loans, technical assistance, and multi-stakeholder partnerships) aimed at promoting economic growth, poverty reduction, and institutional capacity building (OECD, 2019).

Since the early 2000s, the priorities of international cooperation have been profoundly reshaped by the global environmental crisis. Concepts such as sustainable development, green economy, and more recently the circular economy have progressively been integrated into the strategic frameworks of donors and multilateral institutions (UNEP, 2018). This evolution reflects an effort to align development objectives with contemporary climate and ecological imperatives.

However, several critical works highlight that this shift has been accompanied by increasing normativity in international cooperation. Easterly (2006) and Moyo (2009) argue that international aid often promotes standardized conceptual and operational frameworks that are insufficiently adapted to local contexts. In the field of the circular economy, this normativity may translate into the transfer of technological models, regulatory frameworks, or financial mechanisms that are poorly suited to the realities of beneficiary countries.

Moreover, international cooperation largely operates through a project-based logic characterized by short timeframes, sector-specific objectives, and fragmented governance arrangements. While such projects may generate localized innovations, their capacity to induce durable structural transformations remains limited (Barder, 2012). This fragmentation is particularly problematic for a circular transition, which requires a systemic and long-term approach.

Thus, international cooperation stands at the intersection of two contradictory dynamics (Klingebiel, 2014) : on the one hand, a genuine potential to catalyze the circular transition through financing, knowledge transfer, and policy advocacy; on the other, a risk of normative imposition and dependency that constrains local ownership and the sustainability of transformative processes.

3.3. A Critical Analytical Framework for Assessing Cooperation's Contribution

To assess the effective contribution of international cooperation to the circular transition in Benin, this article mobilizes an analytical framework inspired by evaluation approaches used in development policies and environmental projects (OECD-DAC, 2021). This framework enables an analysis that goes beyond a purely descriptive reading to interrogate the structural effects of interventions.

The first criterion is relevance, referring to the alignment of cooperation projects with national priorities, territorial needs, and the capacities of local actors. In the circular economy domain, relevance requires a nuanced understanding of existing value chains, informal practices, and institutional constraints.

The second criterion is coherence, both internal and external. Internal coherence concerns the alignment between objectives, resources mobilized, and expected outcomes. External coherence examines the articulation between cooperation projects, national public policies, and interventions by other technical and financial partners. A lack of coherence is often identified as a major cause of development project failure (Booth, 2012).

Local ownership constitutes a third central criterion. It refers to the ability of national and local actors to appropriate projects, adapt them, and sustain them beyond funding cycles. As Ostrom (1990) emphasizes, the durability of resource management systems largely depends on active stakeholder involvement and context-appropriate governance mechanisms.

Finally, sustainability enables assessment of medium- and long-term effects across economic, social, and environmental dimensions. In the context of the circular economy, sustainability implies scaling up, stabilizing business models, and embedding circular practices within public policies and territorial dynamics.

4. The Circular Economy in Benin: Between Political Commitment and Structural Fragilities

4.1. A Progressive, Sectoral, and Still Uneven Institutionalization

In Benin, the circular economy long remained absent from national strategic frameworks as a transversal development paradigm. Until the mid-2010s, waste management was primarily approached from the perspective of sanitation and urban hygiene, within an essentially hygienist logic. Public interventions and development projects between 2000 and 2015 prioritized the construction of basic infrastructure (collection points, transfer stations, landfill sites), with the primary objective of collecting and removing waste from urban spaces, without structured integration of sorting, prevention, or valorization dimensions (Behanzin et al., 2020). While this orientation was consistent with the priorities of the time and contributed to improvements in urban cleanliness, it did little to establish circular value chains (UN-Habitat, 2020).

The reform initiated in 2018, with the creation of the Waste Management and Sanitation Company (SGDS SA), represents a significant institutional turning point.

« The reform led by SGDS follows a progressive trajectory: it was first necessary to regain operational control of the public waste service before realistically structuring sorting and valorization components. The circular economy is a horizon, but it is built step by step. » - **Technical officer, SGDS SA, August 2025**

This reform reflects an explicit commitment to professionalizing and modernizing the management of municipal solid waste, moving beyond previously fragmented approaches. Rather than adopting a strictly curative perspective, SGDS's ambition is embedded in a vision of sustainable waste management, progressively integrating the entire chain from pre-collection to valorization prospects within the limits of its sectoral mandate.

However, this ambition faces significant structural constraints. The reform initially had to respond to operational emergencies (improving collection, eliminating illegal dumpsites, strengthening logistics), which understandably concentrated efforts on downstream system functions. Investments in sorting, recycling, and processing infrastructure remain limited relative to waste volumes, slowing the effective scaling of circular practices. This reflects less a lack of vision than a temporal gap between strategic ambition and available technical, financial, and organizational capacities.

This situation is partly explained by financial and technical constraints, but also by the still partial absence of a sufficiently incentivizing regulatory and economic framework to sustainably structure valorization sectors. Weak articulation between sanitation policies, industrial development, innovation, and job creation limits the transformative

impact of reforms. In the absence of fiscal incentives, quality standards, green public procurement mechanisms, or targeted support schemes, waste valorization struggles to become a structuring economic driver.

Moreover, the circular economy should not be reduced to municipal solid waste management, which constitutes only one albeit visible segment of a much broader field. Other waste streams in Benin present significant circular potential that remains underexploited (Chabossou & Agnoun, 2022), including agricultural and agro-industrial waste, electronic waste, construction and demolition waste, industrial residues, and biomass. These streams fall under distinct institutional frameworks and require sector-specific policies often linked to industry, agriculture, energy, and construction, beyond SGDS's operational scope.

Thus, the institutionalization of the circular economy in Benin appears both real and incomplete. It is real because structural sectoral reforms have been initiated and circularity is increasingly recognized as a strategic issue. It remains incomplete because it is still largely sectorized, centered on municipal waste, and insufficiently integrated into a transversal economic and industrial vision. Consolidation therefore requires moving beyond a strictly "waste-focused" approach toward an intersectoral circular policy capable of articulating resource management, productive development, and ecological transition.

4.2. Entrepreneurial Initiatives and "Bottom-Up" Circularity

Alongside institutional reforms, Benin has witnessed a proliferation of entrepreneurial initiatives in waste valorization. Often led by young entrepreneurs or community-based organizations, these initiatives focus primarily on plastic recycling, compost production and biofuel generation from organic waste, and material reuse. Pilot initiatives developed by Green Keeper Africa, JEVEV NGO, BIOGAZ BENIN, and numerous local enterprises and cooperatives engaged in water hyacinth valorization play a demonstrative role in applying circular economy principles. In such initiatives, biomass is almost entirely utilized: water hyacinth is exploited from roots to leaves including stems and inflorescences to produce agricultural inputs, artisanal materials, or energy valorization supports, illustrating a logic of full resource circularity.

These dynamics reflect a form of "bottom-up circularity", grounded in local innovation and adaptation to Beninese contextual constraints. They contribute to job creation, waste reduction, and the emergence of new markets, particularly in urban areas (World Bank, 2021).

However, these initiatives remain fragile and face numerous obstacles. Access to finance constitutes a major barrier, as circular business models are often perceived as risky by traditional financial institutions.

« From a technical and environmental standpoint, the results are convincing. However, when it comes to accessing finance, our activities are still perceived as experimental pilot projects. In the absence of credit mechanisms adapted to circular business models, it becomes difficult to consolidate and scale up. » **- Local entrepreneur, November 2025**

This testimony highlights the persistent gap between recognition of the technical and environmental performance of circular initiatives and their limited economic legitimacy within conventional financial systems, revealing a deficit of financing tools tailored to circular business models. Entrepreneurs also face difficulties accessing raw materials, variability in material quality, and unstable markets. Taken together, these financial, material, and commercial constraints confine many initiatives to a prolonged experimental status, limiting their capacity to stabilize, structure sustainable value chains, and contribute fully to the circular transition at territorial and national scales.

The coexistence of formal and informal sectors constitutes another major challenge. Informal waste pickers play a central role in valorization chains but remain largely excluded from institutional arrangements and cooperation-supported projects (Wilson, Velis & Cheeseman, 2006). This exclusion limits the overall efficiency of circular systems and reinforces social inequalities. Institutional marginalization of informal actors prevents recognition of essential know-how, weakens supply chains for recyclable materials, and reduces opportunities for inclusive value chain structuring, even though these actors often form the operational backbone of urban circularity.

Another significant obstacle concerns certification, standardization, and labeling of products derived from local circular economy activities.

« We produce compost regularly with proven agronomic results, and we have been engaged for several months in a certification process. However, the absence, at this stage, of a recognized label limits access to new markets: without

officially validated standards, it is difficult to convince institutional buyers or consider scaling up. » **- Local entrepreneur, November 2025**

Many entrepreneurs and community initiatives struggle to access clear technical standards, recognized quality norms, or certification systems adapted to their production realities. The absence of national standards specific to waste valorization limits formal recognition of circular products, restricts access to structured markets (public procurement, large retail chains, export), and undermines credibility with financial partners and consumers.

Finally, the absence of scaling mechanisms prevents these initiatives from moving beyond the pilot stage. Without structured support in governance, financing, and territorial integration, their contribution to the circular transition remains limited.

4.3. The National Circular Economy Action Plan: Strategic Ambition and Operational Uncertainties

The development of the National Circular Economy Action Plan represents a major policy milestone for Benin. Supported by the African Development Bank, the plan aims to structure a national vision for the circular transition by identifying five priority sectors (municipal solid waste, plastics, transport and mobility, construction, agriculture and forestry) and strategic intervention axes. It aligns with regional and international dynamics recognizing the circular economy as a lever for sustainable development. The plan seeks to strengthen policy coherence, mobilize private investment, and foster the emergence of competitive circular value chains.

Nevertheless, several uncertainties remain regarding the effective implementation of this strategic framework, as illustrated below :

« At the municipal level, we clearly perceive the ambition of the Plan, but the concrete modalities for implementation remain unclear for local governments. We do not always know what our specific roles will be, what resources will be mobilized, or what support mechanisms are planned to translate national orientations into local actions. » **- Municipal technical officer, November 2025**

Governance, intersectoral coordination, and monitoring and evaluation mechanisms are broadly identified in the document, yet their effective operationalization remains a major undertaking in an institutional context marked by multiple actors and sectorized public policies. Establishing transversal steering mechanisms, sectoral arbitration processes, and shared accountability frameworks appears essential to ensure coherent and integrated public action. Furthermore, while the plan outlines several potential funding sources, their concrete articulation between national budget resources, external financing, and private investment will need to be clarified to ensure progressive implementation commensurate with the ambitions expressed.

Thus, the National Circular Economy Action Plan represents both a major opportunity and a governance challenge. Its success will largely depend on the ability of international cooperation and national stakeholders to move beyond project-based approaches toward a systemic and inclusive circular transition. It will also rely on aligning public instruments, ensuring effective involvement of local governments and economic actors, and consolidating sustainable financing and collective learning mechanisms capable of anchoring transformations over time.

5. International Cooperation as a Partial Architect of Benin's Circular Transition

5.1. Multiple Instruments, a Transition Still "in Mosaic"

In Benin, international cooperation mobilizes a wide range of instruments to support the circular transition : technical assistance, project funding, capacity building, support for strategic planning, and multi-stakeholder platforms. This diversification reflects the growing prominence of the circular economy on the international development agenda (Bourdin & Maillefert, 2020) and a willingness to act through different levers (public policy, field-level innovation, and value-chain structuring). However, the coexistence of these instruments does not necessarily ensure coherence or complementarity.

Institutional support typically focuses on producing strategic frameworks and reference documents, and on reforming sectoral governance arrangements (waste, sanitation, environment). While this approach aligns with a "capacity-building" rationale for the State and municipalities, it sometimes prioritizes outputs (plans, strategies, frameworks) over implementation conditions, especially where administrative and budgetary capacities, are limited. This gap

between formulation and operationalization is well documented in public policy under aid-dependent contexts, where formal alignment does not automatically translate into effectiveness (Booth, 2012).

Project financing, for its part, often takes the form of localized experiments: sorting centers, plastic recycling, organic valorization, awareness-raising, and support to entrepreneurial initiatives. Such projects can play an important demonstration and "*proof of concept*" role, but they frequently unfold within short timeframes and limited scopes (Brière & Proulx, 2013). Yet, as Geissdoerfer et al. (2017) emphasize, circularity is inherently systemic: it requires logistics chains, stable markets, standards, behaviors, and infrastructures that cannot be transformed within the pace of a typical project cycle.

Technical assistance and capacity building constitute a third major register. They often address project engineering, value-chain optimization, governance, awareness-raising, and sometimes technology transfer. However, critical scholarship notes that these forms of support can remain "decoupled" from practical constraints: lack of continuity, weak ownership, dependency on external experts, and limited endogenous learning mechanisms (Eyben, 2014). In the circular economy field, this risk translates into an accumulation of tools without sustained territorial facilitation. Illustrating these dynamics, the following figure presents a project implemented in the lacustrine city of Ganvié by a civil society organization, with support from the French Embassy in Benin. The initiative consisted in installing a collection point for plastic waste gathered on Lake Nokoué, as an operational demonstration of circular waste management.

Figure 1 A project implemented in the lacustrine city of Ganvié by a civil society organization, with support from the French Embassy in Benin

This case emblematically illustrates the limits of cooperation centered on demonstrator projects. While the initiative highlights the ability of bilateral cooperation to support visible circular waste management actions, it aligns more with a "showcase" or demonstration logic than with a strategy of structural transformation. In practice, the site is no longer used and is currently inoperative and deteriorated due to the lack of sustainable financing and the absence of an effective treatment and valorization chain for the collected waste. This underscores the need to design cooperation interventions beyond immediate visibility, from a durability and systemic transformation perspective.

Overall, international cooperation appears as an important driver of initial momentum, yet it remains insufficiently structured to generate transformations at scale. The issue is therefore not only the quantity of available instruments,

but their articulation: linking strategy, finance, regulation, markets, and actors in order to move from a "mosaic" transition toward a systemic one.

5.2. Governing Through Partnerships: Actor Plurality, Diverse Forms, Asymmetries, and Uncertain Coordination

Circular economy cooperation arrangements in Benin rely on a wide variety of actors (multilateral institutions, bilateral agencies, international NGOs, foundations, central administrations, local governments, firms, and community organizations) and multiple modalities (multilateral and bilateral cooperation, decentralized cooperation, public–private partnerships, etc.). On paper, this configuration reflects the multi-actor governance logic often promoted in environmental policies. In practice, it frequently generates asymmetric relationships, where financial resources, expertise, and monitoring-and-evaluation frameworks grant donors substantial agenda-setting power (Eyben, 2014).

These asymmetries emerge from the design stage: defining objectives, selecting sectors, choosing indicators, and shaping steering arrangements. Even when national priorities are formally acknowledged, donor agendas and shifting "*development fashions*" can still influence key trade-offs. This situation reflects a classic dilemma: cooperation aims at ownership, yet it operates through accountability mechanisms oriented toward funders (OECD-DAC, 2021).

On the side of the State and national administrations, the challenge often lies less in lack of political will than in capacity constraints: limited human resources, organizational instability, and heavy exposure to multiple projects. Under such conditions, the State may be compelled to arbitrate under urgency or validate projects without being able to integrate them into a broader strategy or ensure their continuity. This fuels a form of "layered governance," where the external coherence of interventions (a central criterion in our analytical grid) remains weak.

Local governments, despite being at the core of waste, urban services, and territorial planning issues, are often involved late and mainly in an execution role. Yet territorial anchoring is a key determinant of sustainability: ecological transitions depend on actors capable of organizing proximity (pre-collection, sorting, awareness-raising, local contracting, and regulation of practices) and stabilizing institutional arrangements (Ostrom, 1990). When local governments are not co-decision makers, post-project continuity becomes uncertain (Dossou, Behanzin & Saïnou, 2021).

In this fragmented governance context, Benin has nevertheless seen the gradual emergence of public–private partnerships (PPPs) seeking to overcome some limits of project-based cooperation, notably by securing both upstream supply (regular access to waste streams) and downstream industrial outlets (solvent markets). The most emblematic dynamic is driven by the Beninese Polypropylene Production Company (CBPP SA) through an industrial project transforming plastic waste into polypropylene pellets, supported by national and international investors, including the Deposit and Consignment Office of Benin (CDCB), the West African Development Bank (BOAD), and other partners. Such partnerships signal a shift toward a circular economy framed not only as an environmental response, but also as a lever for industrial structuring and value creation while simultaneously raising new challenges of regulation, inclusion of informal actors, and coordination with public policies.

Finally, the weak integration of informal actors (waste pickers, pre-collectors, artisanal processors, etc.) reduces both the effectiveness and inclusiveness of cooperation arrangements (Enda Europe, 2017). Yet the literature on waste management systems in the Global South emphasizes that informality constitutes a central socio-economic infrastructure for recovery and recycling (UN-Habitat, 2020). The challenge is less about "formalizing" administratively than about designing appropriate forms of recognition, protection, and contracting that avoid excluding those who already enable part of the circular system to function.

5.3. Pilot Projects and Scaling Up : A Recurrent Cooperation Dilemma

A review of cooperation interventions related to the circular economy reveals a relatively stable pattern: most actions take the form of pilot projects focused on a technology, a value chain, or a specific area. These projects play an important role in experimentation, demonstration, and awareness raising. They can reduce waste locally, create jobs, foster partnerships, and make previously marginal solutions visible.

However, comparative analysis shows that impacts often collide with the scaling challenge. Moving from pilot to public policy requires conditions that are rarely simultaneously met: stable regulation, infrastructure, reliable energy access, solvent end-markets, quality standards, access to land, financing mechanisms, and institutional coordination arrangements. Without these conditions, projects remain "islands of innovation" that do not transform the broader system (Geissdoerfer et al., 2017).

A second obstacle lies in business models. Many projects achieve a technical result (e.g., recycling capacity) without securing upstream inputs (regular and properly sorted flows) or downstream outlets (a stable and solvent market). This fragility results in prolonged dependence on subsidies, limiting sustainability (a core criterion in our analytical grid). In several African contexts, recycling value chains also face competition from imported virgin materials and suffer from the lack of quality standards, which reduces the competitiveness of recycled products (World Bank, 2021).

A third challenge relates to contextualization: some innovations rely on costly equipment that is difficult to maintain, imported inputs, or complex logistics chains. Murray, Skene and Haynes (2017) stress that the circular economy must be designed in relation to concrete economic structures; otherwise, it becomes an attractive narrative with limited operational traction. In such cases, innovation can be "project-effective" yet fragile outside project conditions.

Finally, scaling up requires institutional and collective learning: capitalization, skills transfer, networking among actors, and progressive policy adaptation. When monitoring and evaluation systems focus on compliance and deliverables rather than learning and adjustment, cooperation generates isolated outcomes with limited cumulative effects (OECD-DAC, 2021). The strategic challenge is therefore to organize cooperation that finances not only solutions, but also the social, institutional, and economic conditions required for their diffusion.

6. What Cooperation Produces: Real Progress, Limited Scaling Effects

6.1. Putting Circularity on the Policy Agenda: Frameworks, Standards, and Institutional Learning

One tangible effect of international cooperation in support of the circular economy in Benin is the increased visibility of the concept and its gradual integration into the public agenda. By financing studies, sectoral diagnostics, multi-stakeholder workshops, and planning support, cooperation helps transform a previously diffuse notion into a more stabilized policy reference framework. This dynamic corresponds to what public policy literature describes as a process of "*problem framing*" and category construction, in which external actors can act as policy entrepreneurs, particularly in environmental sectors (UNEP, 2018).

The production of strategic documents, action plans, technical guides, and reference frameworks constitutes a second major effect. These tools contribute to rationalizing public action, structuring a shared policy language, and fostering improved sectoral coordination. From an evaluation standpoint, such outputs strengthen the relevance and internal coherence of interventions when objectives, instruments, and indicators are clarified (OECD-DAC, 2021). In a context where the circular economy is still in an institutionalization phase, these cognitive and programmatic contributions are far from negligible.

A third effect relates to institutional learning. Technical assistance, training, peer exchanges, and organizational support can strengthen the capacities of public administrations and operators to design, monitor, and manage circular initiatives. However, critical literature reminds us that learning becomes durable only when internalized, stabilized in administrative routines, and supported by sustained resources; otherwise, it remains dependent on external expertise and dissipates once projects end (Booth, 2012; Barder, 2012).

These institutional advances nevertheless remain marked by a centralization of effects. Knowledge gains, methods, and reference tools are often concentrated at the national level or within restricted circles of technical experts and partners, with uneven territorial diffusion. This asymmetry limits the ability of circularity to become a truly "*grounded*" public policy co-produced with local governments and communities. Environmental transitions rely heavily on local ownership mechanisms and institutional arrangements adapted to territorial realities (Ostrom, 1990).

Finally, the gap between strategic frameworks and implementation reflects a structural tension: cooperation contributes to "putting circularity into policy," but effectiveness ultimately depends on endogenous factors such as budgeting, intersectoral coordination, regulation, markets, infrastructure, and local facilitation mechanisms. In other words, cooperation can accelerate policy formulation, but it cannot by itself produce structural transformation if systemic conditions remain fragile (Geissdoerfer et al., 2017).

6.2. Economic and Social Outcomes: Innovation and Jobs, but Incomplete Inclusion

International cooperation contributes (directly or indirectly) to the emergence of economic segments linked to circularity: improved collection, pre-sorting, recycling, composting, reuse, and sometimes artisanal eco-design. By supporting pilot projects and entrepreneurial initiatives, it helps broaden the ecosystem of value-recovery actors. These

dynamics align with analyses suggesting that the circular economy can serve as a lever for employment and opportunity in developing countries, provided value chains are structured and markets are solvent (World Bank, 2021).

From an innovation perspective, several interventions stimulate solutions adapted to local constraints: low-technology transformation processes, business models based on local supply chains, and community-based awareness mechanisms. These innovations reflect a pragmatic form of circularity, often more aligned with field realities than imported industrial solutions. This supports Hobson's (2016) argument that circularity is not solely about advanced technologies but also about transformations in practices, organizational forms, and material cultures.

However, these outcomes generally remain modest at the macroeconomic scale. Even successful projects operate within limited scopes and struggle to durably transform market structures, particularly because the competitiveness of recycled materials remains fragile due to price volatility, competition from virgin materials, quality requirements, and logistical constraints. The transition from "local success" to "structural change" therefore remains a central challenge, already identified in the literature on aid and innovation policy in developing contexts (Barder, 2012 ; OECD-DAC, 2021).

From a social standpoint, inclusion remains a critical issue, particularly regarding informal actors. Waste pickers, pre-collectors, and artisanal processors play a decisive role in material recovery and waste reduction, yet they are frequently excluded from formal programs or treated merely as awareness targets rather than economic partners. Excluding the informal sector can generate paradoxical effects: weakening overall system performance while reinforcing socio-economic vulnerabilities among already precarious groups (UN-Habitat, 2020).

Moreover, international cooperation sometimes prioritizes short-term measurable outputs (jobs created, volumes collected, equipment installed) over deeper social transformations such as improved working conditions, social recognition of waste-related occupations, fair contracting arrangements, local governance strengthening, and economic rights. Yet, from a just transition perspective, these dimensions are essential for consolidating the legitimacy of circularity and ensuring sustained local ownership of change.

6.3. Environmental Gains: Local Improvements, Sustainability and Systemic Effects in Question

International cooperation interventions produce tangible environmental benefits, particularly in urban areas where sanitation and waste pressures are most visible. Urban development projects financed by the World Bank since the 2000s (PGUD, PGUD-2, PUGEMU, PAURAD) have significantly contributed to establishing basic waste management infrastructure, limiting certain forms of pollution, improving urban cleanliness, and when viewed more broadly reducing emissions associated with landfilling and informal burning. These gains align with circular economy objectives aimed at reducing environmental externalities and improving material efficiency (Ghisellini, Cialani & Ulgiati, 2016).

However, these improvements remain largely localized and sometimes reversible. When systems depend heavily on external funding, project completion can lead to declining operational performance : equipment dysfunction, cessation of sorting activities, reduced awareness efforts, and weakened partnerships. This fragility illustrates a classic limitation of project-based approaches: environmental results exist but are not sustained if local institutional and financial systems do not take over (OECD-DAC, 2021).

Furthermore, the scale of environmental gains is constrained by growth effects. In many urban contexts, waste generation linked to urbanization and changing consumption patterns outpaces the capacity of pilot projects to achieve net reductions in material flows. In other words, cooperation can improve segments of the system without reversing overall trends, in the absence of systemic approaches and large-scale transformation mechanisms (Geissdoerfer et al., 2017).

Another often underestimated issue concerns the environmental quality of recovery solutions themselves. Certain informal recycling activities may generate secondary pollution (toxic smoke, hazardous exposure, untreated discharges) when not supported by safety standards and monitoring systems. International cooperation can play a positive role by promoting safety and quality standards, but this requires regulatory capacity and progressive support to informal actors rather than exclusion (UN-Habitat, 2020).

Finally, environmental impact assessment often suffers from insufficiently robust measurement systems. Indicators tend to focus on volumes treated rather than net outcomes such as pollution reduction, public health impacts, carbon footprint, or material durability. From a scientific perspective, this underscores the need to strengthen monitoring and evaluation systems by integrating impact and sustainability indicators and adopting a collective learning approach

rather than a compliance-driven logic. Only under these conditions can international cooperation contribute to cumulative and durable environmental gains consistent with the ambition of a circular transition.

7. Why Impact Remails Limited : Structural Constraints of a "Project-Based" Cooperation Model

7.1. Fragmentation, Short Timeframes, and Siloed Governance

A primary structural limitation of international cooperation supporting the circular economy in Benin lies in the fragmentation of interventions. Projects are often designed and managed according to donor-specific logics, with distinct priorities, timelines, reporting requirements, and geographic scopes. Although most interventions formally align with national strategic orientations and reflect a commitment to government priorities, their operational implementation remains largely compartmentalized. This configuration produces a mosaic of sometimes innovative actions that are insufficiently articulated with one another, even though circular economy systems require interconnected value chains, shared infrastructure, and overall coherence beyond the simple juxtaposition of projects (Geissdoerfer et al., 2017).

This fragmentation is reinforced by the dominant operational logic of cooperation: projectization (Almaache & Ennahal, 2022). Projects are framed within relatively short cycles (often 24 to 60 months), whereas institutional, economic, and behavioral transitions unfold over much longer horizons. Aid literature has long highlighted the mismatch between donor timelines and transformation timelines (Booth, 2012 ; OECD-DAC, 2021). In the circular economy domain, this tension is particularly acute, since viable value chains require the progressive stabilization of material flows, standards, markets, and institutional arrangements.

From a coherence standpoint, fragmentation results in insufficient coordination across projects and sectors. Circularity engages multiple public policy domains (environment, urban planning, industry, employment, health, taxation, and education) yet interventions often remain confined to a single sector (waste) or a technical logic (collection and sorting). Cooperation mechanisms therefore struggle to build intersectoral synergies, even though such synergies are decisive for scaling transformation (UNEP, 2018).

Monitoring and evaluation systems may further reinforce siloed approaches. Indicators frequently focus on deliverables and outputs (equipment installed, workshops held, volumes collected) rather than systemic transformations (net pollution reduction, stability of recycled material markets, sustainable service improvements, integration of informal actors). This measurement bias privileges what is immediately observable at the expense of what is structural and cumulative (OECD-DAC, 2021).

Finally, fragmentation imposes institutional costs. It places heavy demands on administrations and local actors, who must respond to multiple, often unharmonized requirements, thereby limiting their capacity to steer the transition strategically. In such conditions, cooperation may paradoxically weaken governance by dispersing attention and resources instead of supporting a unified trajectory of transformation.

7.2. The Temptation of the "Transferred Model" : Contextualization Deficits and Misalignment Effects

A second major constraint lies in the importation of models, tools, and solutions designed in different socio-economic contexts. This transfer, often motivated by the search for "best practices" or ready-made solutions, can result in technically efficient systems that remain socially and institutionally fragile. Murray, Skene, and Haynes (2017) remind us that the circular economy is an evolving framework whose operationalization depends closely on economic structures, industrial capacities, and governance systems.

A lack of contextualization first affects project relevance. Some interventions assume prerequisites (source separation, stable logistics, reliable energy supply, structured markets, and quality standards) that are not always present. Under such conditions, innovation may produce a visible and valorized "showcase effect" without embedding itself in a realistic diffusion pathway. Critical aid literature warns against prioritizing solutions that appear scalable on paper but remain weakly grounded in local realities (Easterly, 2006; Barder, 2012).

Contextualization also involves recognizing social practices and rationalities. Hobson (2016) emphasizes that circularity is not merely an engineering challenge; it requires transformations in behavior, norms, and material cultures. When cooperation mechanisms overlook these dimensions, outcomes remain superficial: limited adoption, gaps between discourse and practice, or silent resistance from affected actors.

Another critical issue concerns the articulation between formal and informal systems. In many African urban contexts, the informal sector constitutes a social infrastructure for recovery and sorting (UN-Habitat, 2020). When cooperation promotes overly formalized models, it may inadvertently marginalize these actors and weaken existing value chains. As a result, the circular transition may lose part of its operational foundation while reinforcing social inequalities.

Finally, insufficient contextualization can lead to increased dependence on imported inputs, external expertise, or equipment that is costly to maintain. Such dependencies directly undermine sustainability : solutions function during project implementation but weaken once external resources are withdrawn. Transformative cooperation should therefore prioritize adaptive, incremental, and locally appropriable innovation pathways rather than standardized model transfers.

7.3. Fragile Ownership and Financial Dependence : The "Post-Project Wall"

A third major limitation concerns ownership and dependence on external funding. In many cases, projects are carried by actors whose survival depends on continued subsidies, due to the absence of endogenous financing mechanisms, solvent markets, or sustained public support. This dependency has been strongly criticized in aid literature, notably by Moyo (2009), who highlights the adverse effects of prolonged assistance when national financing and governance systems do not strengthen simultaneously.

In the circular economy domain, financial dependence manifests at multiple levels (McDonald, Normandin & Sauvé, 2016). It affects infrastructure (sorting, collection, treatment), facilitation mechanisms (awareness, community mobilization), and circular enterprises themselves, which face price volatility and uncertain markets. Without structuring public and private financing mechanisms (fiscal incentives, green public procurement, guarantees, seed funds, and credit facilities) circular initiatives remain vulnerable and struggle to consolidate (World Bank, 2021).

This dependence is aggravated by the lack of institutional mechanisms capable of ensuring post-project continuity. Administrations and local governments may lack human resources, operational budgets, contractual engineering capacity, and regulatory capabilities. Under these conditions, even well-designed projects may erode once external support ends. The key question is therefore not only "what has been achieved," but "who has the capacity to continue," which lies at the heart of sustainability.

Weak ownership also relates to project design processes. When local actors are not fully involved in defining objectives, indicators, and technical choices, they struggle to assume responsibility for the resulting systems. Eyben (2014) emphasizes the political dimension of aid: ownership cannot be decreed; it is built through negotiation, power sharing, and recognition of local priorities.

Finally, ownership must be considered at the level of communities and livelihoods, not solely institutions. Integrating waste workers, securing working conditions, ensuring social recognition, and promoting fair contractual arrangements are essential components of an inclusive circular transition. Without them, circularity risks producing environmental gains without social justice, thereby undermining its legitimacy and long-term sustainability.

8. Reconfiguring Cooperation for a Truly Transformative Circular Transition

8.1. Scaling Up and Shifing Logic: From Project Aggregation to System Transformation

The preceding analysis shows that the primary limitation of international cooperation in advancing the circular economy in Benin is not the lack of initiatives, but their embedding within a discontinuous project logic that is poorly suited to the systemic nature of circular transitions. A genuinely transformative cooperation paradigm therefore requires a shift from isolated interventions toward the transformation of socio-technical systems (Geissdoerfer et al., 2017).

Such transformation entails simultaneous action across multiple levers: public policy frameworks, regulatory systems, infrastructure, markets, behavioral change, and institutional capacities. A systemic approach also requires stronger coordination across sectors (environment, industry, employment, urban planning, and fiscal policy) as well as across governance levels, from national to local and community scales. Yet these articulations remain peripheral in many cooperation mechanisms, which are still largely structured around sectoral mandates.

In this perspective, international cooperation should position itself less as a provider of discrete solutions and more as a facilitator of transition pathways. This implies supporting governments and territories in defining long-term visions

grounded in realistic priorities, sequenced reforms, and negotiated political compromises. Research on sustainability transitions emphasizes that structural change is rarely linear; rather, it unfolds through incremental adjustments, learning processes, and actor coalitions (Hobson, 2016).

Scaling up also requires recognizing that not all initiatives can be immediately "scaled". Some interventions must first consolidate capacities, stabilize markets, or shift social norms before generating measurable quantitative impacts. Within this framework, success should not be assessed solely by volumes processed or infrastructure installed, but by contributions to building a functional circular ecosystem.

Finally, a systemic logic calls for rethinking success metrics. Instead of privileging rapid and visible outputs, cooperation should value less spectacular but decisive progress: improved inter-institutional coordination, stabilization of regulatory frameworks, gradual integration of informal actors, and the emergence of local recycled-material markets. Only under such conditions can cooperation support a credible and durable circular transition.

8.2. Territorial Co-construction and Actor Recognition: The Core of Ownership

A sustainable circular transition cannot be externally imposed; it must be co-produced with the actors who enact it in everyday practice (Maillefert, 2024). Territorial co-construction therefore emerges as a central lever for overcoming the ownership deficits observed in many cooperation projects. As Ostrom (1990) demonstrates, resource governance systems are more durable when rules are collectively defined and adapted to local contexts.

In Benin, this co-construction requires an expanded role for local governments, not only as service operators but as strategic actors in the transition. Municipalities lie at the heart of waste management, urban services, awareness-raising, and local regulation. Cooperation mechanisms would therefore benefit from strengthening local planning, contracting, and governance capacities rather than bypassing municipalities through parallel project structures.

Recognizing informal actors is another cornerstone of ownership. Waste pickers, pre-collectors, and artisanal recyclers constitute a significant share of the "real" circular economy in African cities. Ignoring or attempting to replace them with purely formal systems may weaken existing value chains. Conversely, gradual recognition strategies (improving working conditions, providing equipment access, enabling contractual arrangements, and fostering collective organization) can enhance both environmental performance and social inclusion (UN-Habitat, 2020).

Co-construction also entails acknowledging local knowledge systems and social rationalities (Béhanzin, Agbandji & Takpé, 2025). Circularity is not solely about material flows; it is shaped by perceptions of waste, consumption practices, social norms, and labor relations. Projects that integrate these dimensions are more likely to produce lasting change than those limited to technical solutions (Hobson, 2016).

Ultimately, co-construction requires a degree of power sharing. As Eyben (2014) argues, ownership becomes meaningful only when local actors possess genuine influence over strategic choices. For international cooperation, this implies revisiting project governance mechanisms to create spaces for negotiation, experimentation, and continuous adaptation.

8.3. Financing Duration and Collective Learning: Toward Impact-Oriented Cooperation

The durability of a circular transition depends fundamentally on the financing mechanisms that sustain it. Transformative cooperation cannot rely solely on short-term grants (Fino, 1996); it must help structure financial ecosystems capable of supporting the progressive scaling of circular value chains. This requires a mix of instruments: public funding, private investment, risk-sharing mechanisms, green public procurement, and targeted support for circular enterprises (World Bank, 2021).

A key challenge is reducing dependence on external funding by strengthening national and local resource mobilization capacities. This includes incentive-based regulatory frameworks, fiscal measures favoring waste valorization, and the integration of circularity into broader economic and industrial development strategies. International cooperation can play a catalytic role by supporting these reforms rather than substituting for endogenous financing over the long term (Lazrak & Malainine, 2024).

Impact-oriented cooperation also requires rethinking monitoring and evaluation systems. Conventional indicators focused on immediate outputs are insufficient to capture systemic transformations. Instead, evaluation frameworks should integrate indicators of durability, social inclusion, institutional resilience, and learning processes. The OECD-

DAC (2021) emphasizes the importance of evaluation systems oriented toward learning and adaptive management rather than compliance alone.

Collective learning represents a strategic lever for circular transitions (Belanger, 2015). Knowledge capitalization, actor networking, inter-territorial exchanges, and feedback mechanisms enable continuous adjustment, prevent the repetition of errors, and progressively strengthen local capacities. International cooperation can support these dynamics by funding dialogue platforms, knowledge-sharing systems, and long-term accompaniment mechanisms.

Ultimately, orienting cooperation toward impact requires redefining its role: not merely to "do," but to make transformation possible. This means enabling actor coalitions, stabilizing institutional rules, recognizing existing practices, and fostering the gradual construction of a circular economy anchored in Beninese realities. In this capacity to support transformation trajectories rather than immediate outputs lies the truly transformative potential of international cooperation.

9. Conclusion

This analysis of the contribution of international cooperation to the transition toward a circular economy in Benin reveals an ambivalent dynamic, characterized by both significant progress and persistent structural constraints. On the one hand, international cooperation has played an undeniable role in the emergence of the circular economy as a public policy reference framework, supporting the development of strategic plans, the diffusion of concepts, and the experimentation of innovative solutions. It has contributed to structuring key sectors, strengthening certain institutional capacities, and stimulating entrepreneurial initiatives capable of generating economic and environmental value.

On the other hand, the findings show that this contribution remains largely constrained by a fragmented project-based logic, weak coordination, and insufficient anchoring in territorial dynamics. Dependence on external funding, the transfer of insufficiently contextualized exogenous models, and the marginal integration of informal actors limit the transformative potential of interventions. These observations echo critical analyses of international aid, which highlight the recurring gap between strategic ambitions and durable structural outcomes (Easterly, 2006 ; Booth, 2012).

The article thus highlights a central paradox: while the circular economy requires a systemic, long-term, and deeply territorialized approach, international cooperation continues to operate predominantly through short-term timeframes and sectorally siloed frameworks. This structural mismatch weakens the circular transition by confining it to pilot experiences without meaningful scaling. It calls into question the capacity of current cooperation mechanisms to support complex socio-economic transformations involving a reconfiguration of relationships among the state, markets, territories, and communities.

In light of these findings, the circular transition in Benin appears less as a deficit of initiatives than as a governance challenge of transformation. International cooperation should not be conceived merely as a source of funding or technical solutions, but as a process of political and institutional co-construction. This implies a shift in the role of technical and financial partners from project architects to system facilitators capable of supporting policy alignment, intersectoral coordination, and local ownership of circular dynamics.

Operationally, this evolution requires strengthening the territorial anchoring of interventions, fully integrating informal and community actors into circular value chains, and developing hybrid financing mechanisms that promote autonomy and long-term sustainability. It also calls for rethinking monitoring and evaluation frameworks in order to prioritize collective learning, adaptive management, and long-term impact over the achievement of short-term indicators.

From a theoretical perspective, this research contributes to debates on the circular economy in the Global South by emphasizing its fundamentally political and territorial character. It invites a shift beyond technocentric approaches to consider circularity as a process of social transformation embedded in power relations, cultural practices, and historically situated development trajectories. In this sense, it advocates for closer articulation between circular economy studies, development sociology, and critical approaches to international cooperation.

Finally, this study opens several avenues for future research. Further work could deepen comparative analyses across West African countries, explore the conditions for scaling locally rooted circular initiatives, and examine emerging forms of hybrid governance involving public, private, and community actors. Such lines of inquiry are essential to better understand how international cooperation can move beyond accompaniment to co-producing circular transitions that are genuinely sustainable, inclusive, and grounded in the realities of countries such as Benin.

References

[1] Almaache, M., & Ennahal, A. (2022). Key factors and success criteria in project management : A literature review. Revue Française d'Économie et de Gestion, 3(3), 296–316.

[2] Barder, O. (2012). What is development cooperation?. https://www.cgdev.org/blog/what-development

[3] Bélanger, C. (2015). Collective learning, innovation and territorialized support functions for development: Definition, dimensions and influence. Université du Québec à Chicoutimi. 49.

[4] Behanzin, P. (2026). Local dynamics and perceptions: A socio-anthropological approach to waste management in the lacustrine city of Ganvié, Benin. Doctoral dissertation, University of Abomey-Calavi. 360.

[5] Behanzin, P., Agbandji, L., & Takpé, A. (2025). Solid waste valorization and the challenge of social representations in Ganvié, Benin. International Journal of Social Science and Human Research, 8(5), 2894–2902. https://doi.org/10.47191/ijsshr/v8-i5-32

[6] Behanzin, P., Agbandji, L., Saïnou, J., & Dossou-Vou, R. (2020). Determinants of household subscription to pre-collection services for municipal solid waste in Greater Nokoué, Benin : The case of Porto-Novo. Espace Géographique et Société Marocaine, 36 (Special Issue : African Geographic Studies), 81–101. https://doi.org/10.34874/IMIST.PRSM/EGSM/21674

[7] Booth, D. (2012). Development as a collective action problem: Addressing the real challenges of African governance. 132.

[8] Bourdin, S., & Maillefert, M. (2020). Introduction – The circular economy : Governance modes and territorial development. Natures Sciences Sociétés, 28(2), 101–107.

[9] Brière, S., & Proulx, D. (2013). Success factors in international development projects : Lessons from a Morocco-Canada case study. International Review of Administrative Sciences, 79(1), 171–191. https://doi.org/10.3917/risa.791.0171

[10] Chabossou, A. F., & Agnoun, O. R. (2022). Monetary valuation of environmental externalities from waste electrical and electronic equipment (WEEE) in the city of Cotonou. Scientific Days of Beninese Economics. 24. https://doi.org/10.34874/IMIST.PRSM/ISSM/29279

[11] Dossou, G., Behanzin, P., & Saïnou, J. (2021). Public policies and participation: The experience of urban development projects in Benin (Case of the Urban Development and Decentralization Support Project). International Social Sciences & Management Journal, 5, 148–175. https://doi.org/10.34874/IMIST.PRSM/ISSM/29279

[12] Easterly, W. (2006). The White Man's Burdern: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good. Penguin Books. 448.

[13] Enda Europe. (2017). Overview of the informal waste sector in Africa and the Caribbean. Programme "Re-Sources: Platform for promoting waste valorization in Africa and the Caribbean.". 86.

[14] Eyben, R. (2014). International aid and the making of a better world: Reflexive practice. Routledge. Mundo Critico. 3. 172-174

[15] Fino, D. (1996). Deadlocks and promises: The ambiguity of development cooperation. Graduate Institute Publications. Geneva. 211.

[16] Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). The circular economy – A new sustainability paradigm? Journal of Cleaner Production, 143, 757–768.

[17] Hobson, K. (2016). Closing the loop or squaring the circle? Locating generative spaces for the circular economy. Progress in Human Geography, 40(1), 88–104.

[18] Ikponmwosa, A., Uwaga, M. A., Ogunbiyi, E. O., & Nko, O. S. (2024). Waste management and circular economy: A review of sustainable practices and economic benefits. World Journal of Advanced Research and Reviews, 22(2), 1708–1719.

[19] Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. Resources, Conservation & Recycling, 127, 221–232.

[20] Klingebiel, S. (2014). Development cooperation: Challenges of the new aid architecture. Palgrave Pivot. 126.

[21] Lazrak, B., & Malainine, C. (2024). International development cooperation: An essential pillar for a global future? Revue Française d'Économie et de Gestion, 5(11), 203–218.

[22] Maillefert, M. (2024). From sustainable development to the circular economy: Moving from accommodation policies to a transition toward a new model. Revue Juridique de l'Environnement, 49(3), 525–528.

[23] McDonald, M., Normandin, D., & Sauvé, S. (2016). The circular economy: An unavoidable transition. Presses de l'Université de Montréal. 192.

[24] Moyo, D. (2010). Dead Aid: Why Aid Is Not Working and How There Is a Better Way for Africa. Farrar, Straus and Giroux. 208.

[25] Murray, A., Skene, K., & Haynes, K. (2017). The circular economy: An interdisciplinary exploration of the concept and application in a global context. Journal of Business Ethics, 140(3), 369–380.

[26] Niang, A. (2021). The circular economy: An innovation for territorial development? Doctoral dissertation, Paris-Saclay University. 162.

[27] Niang, A., Bourdin, S., & Torre, A. (2020). The circular economy: What development challenges for territories? Sustainable Development and Territories, 11(1). https://doi.org/10.4000/developpementdurable.16902

[28] OECD. (2019). Development Co-operation Report 2019: A fairer, greener, safer tomorrow. OECD Publishing. Paris. 156.

[29] OECD-DAC. (2021). Applying evaluation criteria thoughtfully. https://www.oecd.org/en/publications/applying-evaluation-criteria-thoughtfully_543e84ed-en.html

[30] Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge University Press. 298.

[31] UNEP. (2018). Circular economy and resource efficiency in developing countries. 57.

[32] UN-Habitat. (2020). Waste Wise Cities Report: Step-by-step guide to assess a city's municipal solid waste management performance through SDG indicator 11.6.1 monitoring. 72.

[33] Wilson, D. C., Velis, C., & Cheeseman, C. (2006). Role of informal sector recycling in waste management in developing countries. Habitat International, 30(4), 797–808.

[34] World Bank. (2021). Market study for recycling and circular economy in Sub-Saharan Africa. 89.