

Basketry Cooperatives in the Marrakech-Safi Region: A Case Study on Women's Cultural Heritage and Local Development

[Les coopératives de vannerie dans la région de Marrakech-Safi : une étude de cas sur le patrimoine culturel des femmes et le développement local]

Layla BOULKHIR¹, and Fatima TOUHAMI¹

¹ LARPEG, Faculty of Economics and Management, Sultan Moulay Slimane University, Beni Mellal, Morocco.

Abstract:

This study examines the role of women's basketry cooperatives in the Marrakech-Safi region in fostering women's economic and social empowerment and promoting intangible cultural heritage. It highlights how these social and solidarity economy structures simultaneously improve members' living conditions and preserve traditional artisanal skills threatened by globalization and industrial competition. The research applies a binary logistic regression model to a representative sample of women cooperative members, identified through ODCO databases and INDH programs. Empowerment is measured across three dimensions: active participation in decision-making, independent management of income, and intergenerational transmission of artisanal know-how. Results show that education, seniority within the cooperative, and access to broader markets significantly enhance the likelihood of empowerment, while marital status acts as a constraint. Basketry cooperatives therefore emerge not only as economic actors but also as key contributors to sustainable local development, cultural preservation, and the strengthening of social capital.

Keywords: Women's empowerment, Basketry cooperatives, Cultural heritage, Local development.

Résumé

Cette étude analyse le rôle des coopératives féminines de vannerie de la région Marrakech-Safi dans l'autonomisation économique et sociale des femmes et la valorisation du patrimoine culturel immatériel. Elle vise à montrer comment ces structures de l'économie sociale et solidaire améliorent les conditions de vie de leurs membres tout en préservant des savoir-faire artisanaux menacés par la mondialisation et la concurrence industrielle. La méthodologie adoptée repose sur un modèle de régression logistique binaire appliquée à un échantillon représentatif de femmes coopératrices, issu des bases de données de l'ODCO et des programmes de l'INDH. L'autonomisation est mesurée à travers la participation décisionnelle, la gestion indépendante du revenu et la transmission intergénérationnelle des savoir-faire. Les résultats indiquent que l'éducation, l'ancienneté et l'accès aux marchés renforcent significativement l'autonomie, tandis que le statut matrimonial constitue une contrainte. Ces coopératives apparaissent ainsi comme des vecteurs de développement local durable et de capital social.

Mots-clés : Autonomisation des femmes, Coopératives de vannerie, Patrimoine culturel, Développement local.

1. Introduction

In many developing countries, and particularly in rural areas, women continue to face significant barriers that limit their economic participation, decision-making autonomy, and social recognition. The social and solidarity economy (SSE), through organizational forms such as cooperatives, has progressively emerged as a strategic lever for inclusive and sustainable development. Cooperatives, defined by the International Labour Organization (ILO) as voluntary associations of persons united to meet their common economic, social, and cultural needs through a jointly owned and democratically controlled enterprise, provide women with opportunities for learning, governance, and value creation.

In Morocco, the cooperative sector has experienced significant growth over the past two decades, driven by programs such as the National Initiative for Human Development (INDH), the Green Morocco Plan, and more recently the Mourafaka program implemented by the Office for the Development of Cooperation (ODCO). These initiatives have enabled many rural women to integrate into local value chains, particularly in agriculture, handicrafts, and terroir products. Nevertheless, structural challenges persist: limited access to finance, strong social norms, weak infrastructure, and insufficient female representation in decision-making bodies. Within this context, basketry cooperatives in the Marrakech-Safi region offer a particularly relevant case study. They combine an economic dimension (through the production and commercialization of basketry and terroir products) with a cultural dimension, by preserving and transmitting ancestral artisanal know-how. While their economic role is acknowledged, their actual contribution to multidimensional women's empowerment and the safeguarding of intangible cultural heritage remains underexplored. This raises the following research question: to what extent, and through which mechanisms, do women's basketry cooperatives in the Marrakech-Safi region contribute to women's empowerment and cultural heritage valorization while fostering sustainable local development? To address this question, the article is structured into four sections. The first presents the theoretical and analytical framework of women's empowerment through cooperatives, drawing on the Capability Approach and social capital theory. The second details the research methodology, based on field survey data and a binary logistic regression model. The third section analyzes the empirical results relating to empowerment dimensions and their determinants. Finally, the fourth discusses the implications of these findings in terms of cooperative governance, cultural heritage promotion, and sustainable territorial development.

2. Literature Review

2.1. Key Definitions and Theoretical Framework

Women's empowerment remains a multidimensional concept widely debated in social sciences. The Capability Approach (Sen, 1999; Nussbaum, 2000) emphasizes expanding freedoms and opportunities, while Kabeer (1999) defines empowerment as the ability to make meaningful strategic choices in contexts of constraints. Cooperatives, defined by the ILO (2002), are voluntary and democratic organizations that support collective needs. More recent studies (El Hilali et al., 2023; Boulkhir et al., 2025) highlight the importance of linking empowerment and cultural heritage, especially in the context of women's cooperatives in Morocco.

Table 1. Key conceptual definitions

Concept	Definition	References
Women's empowerment	Ability to make strategic choices and expand capabilities	Kabeer (1999); Sen (1999); Nussbaum (2000)
Cooperative	Voluntary, democratic, and member-owned organizations	ILO (2002); Defourny C Nyssens (2017)
SSE and heritage	SSE as a lever for cultural and economic sustainability	El Hilali et al. (2023); Boulkhir et al. (2025)

Sources : Kabeer (1999), Sen (1999), Nussbaum (2000), ILO (2002), Defourny C Nyssens (2017), El Hilali et al. (2023), Boulkhir et al. (2025).

The literature suggests empowerment must be understood beyond economics, incorporating cultural and patrimonial dimensions that cooperatives help to preserve.

2.2. Determinants of Women's Empowerment in Cooperatives

Recent research shows that empowerment is shaped by structural and institutional factors such as education, seniority, governance, and market access. In Morocco, Ibourk & Hninou (2025) demonstrate that education and cooperative seniority enhance empowerment, while marital status remains a structural barrier.

Table 2. Determinants of women's empowerment in recent literature

Variable	Expected effect	References
Education	↑ Decision-making autonomy and leadership	Malhotra (2002); Ibourk C Hninou (2025)
Cooperative seniority	↑ Confidence and participation	Mayoux (2010); Anderson et al. (2020)
Market access	↑ Income and independence	FAO (2018); OECD (2021); Aberji (2022)
Marital status	↓ Autonomy due to social constraints	Kabeer (2012); Ibourk C Hninou (2025)
Cooperative governance	↑ Collective agency and leadership	Birchall (2018); Boulkhir et al. (2025)

Sources: Malhotra (2002), Mayoux (2010), Anderson et al. (2020), FAO (2018), OECD (2021), Aberji (2022), Kabeer (2012), Birchall (2018), Ibourk C Hninou (2025), Boulkhir et al. (2025).

Recent contributions (2022–2025) highlight that empowerment outcomes depend not only on economic integration but also on governance, institutional support, and cultural heritage valorization.

2.3. Research Hypotheses

Based on the literature, we formulate hypotheses that link the identified determinants to empowerment outcomes in basketry cooperatives in Marrakech-Safi.

Table 3. Research hypotheses

Hypothesis	Statement
H_1	Education has a positive effect on women's empowerment.
H_2	Longer seniority in cooperatives increases empowerment probability.
H_3	Access to broader markets significantly enhances autonomy.
H_4	Marital status negatively affects women's empowerment.
H_5	Participation in governance bodies fosters empowerment.

Sources: Inspired by Kabeer (1999, 2012), Anderson et al. (2020), Aberji (2022), Ibourk C Hninou (2025), Boulkhir et al. (2025).

These hypotheses extend earlier studies by integrating the cultural heritage dimension, still underexplored in the literature, into the case of basketry cooperatives in Marrakech-Safi.

3. Methodology

3.1. Description of the study area

The Marrakech-Safi region is one of the most dynamic in Morocco in terms of cooperatives. It accounts for around 20% of the national total of agricultural cooperatives, with 3,363 units, of which 93% are active (ODCO, 2022). Among them, 810 cooperatives are exclusively managed by women, highlighting the strong role of female leadership in the regional cooperative landscape.

From an agricultural perspective, the region covers 3.92 million hectares, including 350,000 hectares of irrigated land, and encompasses 285,000 farms. With a population of 4.52 million inhabitants, of which 57% live in rural areas, Marrakech-Safi demonstrates the importance of agriculture and handicrafts in its local economy.

3.2. Distribution of basketry cooperatives

The study sample includes 85 women-only basketry cooperatives spread across six provinces. Their geographical distribution is strategic, as these areas combine mountainous terrain with rich local products.

Table 4. Distribution of basketry cooperatives by province

Province	Number of cooperatives	Percentage
Al Haouz	18	21%
Essaouira	15	18%
Chichaoua	13	15%
Marrakech	12	14%
Rehamna	10	12%
El Kelaâ Sraghna	17	20%
Total	85	100%

Source: ODCO (2023), field survey (2024).

The distribution confirms that rural and mountainous provinces (Al Haouz, Essaouira, Chichaoua) host the majority of basketry cooperatives, emphasizing their role in both economic activity and cultural preservation.

Figure 1. Geographic distribution of provinces in the Marrakech-Safi region.



Source: High Commission for Planning (HCP)

3.3. Sampling strategy and data collection

The study focused on women's basketry cooperatives in the Marrakech-Safi region, as identified by the Office of Cooperative Development (ODCO). To ensure representativeness, a stratified approach was adopted, considering both the provincial distribution of cooperatives and their market access diversity (local, regional, national). Data were collected through a mixed-methods approach, combining quantitative surveys and qualitative interviews.

Table 5. Sampling strategy and data collection methods

Element	Description
Target population	Women-only basketry cooperatives (810 identified by ODCO)
Sample	85 cooperatives selected based on representativeness and market diversity
Survey respondents	340 members (average of 4 per cooperative)
Data collection methods	<ul style="list-style-type: none"> - Structured questionnaire (socio-economic profile, governance, revenues, cultural transmission) - Semi-structured interviews with 12 cooperative leaders - Direct observation of production workshops

Source: ODCO (2023), Field survey (2024).

The combination of structured surveys, interviews, and observation strengthens both the validity and reliability of the research. This mixed approach ensures that the quantitative findings are contextualized with qualitative insights, particularly regarding governance practices and cultural heritage transmission.

3.4. Variables and Operationalization

In order to evaluate the determinants of women's empowerment within basketry cooperatives, the study relies on both socio-demographic and cooperative-level variables. The dependent variable captures empowerment as a binary outcome, while the independent variables reflect individual, organizational, and territorial characteristics. These variables were defined based on existing literature (Kabeer, 1999; Malhotra, 2002; Mayoux, 2010; Anderson et al., 2020; Ibourk & Hninou, 2025).

Table 6. Variables and measures used in the study

Type	Variable	Measurement / Scale	Expected effect
Dependent	Women's empowerment	Binary: 1 = empowered; 0 = not empowered	Global impact
Socio-demographic	Age	Continuous (years)	+/-
	Education level	Dummy: 0 = illiterate; 1 = literate	+
	Marital status	Dummy: 1 = married; 0 = other	-
Cooperative-related	Seniority	Continuous (years of membership)	+
	Income	Annual income from cooperative (MAD)	+
	Market access	Dummy: 0 = local; 1 = regional/national/international	+
	Governance	Dummy: 1 = participates in decision-making; 0 = no	+
Territorial	Location	Dummy: 0 = urban; 1 = rural	+/-

Sources: Adapted from Kabeer (1999, 2012), Malhotra (2002), Mayoux (2010), Anderson et al. (2020), Ibourk C Hninou (2025).

This operationalization captures the multidimensional nature of empowerment, combining individual characteristics (education, marital status), cooperative experience (seniority, income, governance), and territorial factors (rural vs. urban). It allows for a robust econometric analysis through binary logistic regression.

3.5. Method of analysis: binary logistic regression

The analysis relies on a logit model that evaluates the probability of empowerment (Y=1) based on individual and cooperative characteristics:

$$\ln\left(\frac{P(Y = 1)}{1 - P(Y = 1)}\right) = \beta_0 + \beta_1 Education + \beta_2 Seniority + \beta_3 Market\ access + \beta_4 Marital\ status + \beta_5 Income + \beta_6 Governance + \beta_7 Location + \varepsilon$$

- Estimation method: Maximum Likelihood Estimation (MLE).
- Interpretation: Odds ratios (OR) are used to measure the marginal effect of each factor.
- Software: SPSS v.27 and Stata v.17.

3.6. Fiabilité et validité

- **Fiabilité** : test Cronbach's Alpha > 0,7 pour les dimensions de l'empowerment.
- **Validité** : triangulation des données (questionnaire, entretiens, observation).
- **Éthique** : consentement libre et anonymat garanti.

4. Results

4.1. Descriptive statistics of the sample

The survey covered 340 women members across 85 basketry cooperatives in six provinces of the Marrakech-Safi region. Table 4 presents the socio-demographic profile of respondents.

Table 7. Socio-demographic characteristics of respondents (n=340)

Variable	Categories	%
Age	≤30 years	28
		%
	31–45 years	46
		%
	>45 years	26
		%
Education level	Illiterate	41
		%
	Primary or above	59
		%
Marital status	Married	67
		%
	Single / divorced / widowed	33
		%
Residence	Rural	72
		%
	Urban	28
		%

Source: Field survey (2024).

The majority of respondents are rural, married women, with nearly half aged between 31 and 45. Illiteracy remains relatively high (41%), underlining structural educational barriers.

4.2. Cooperative-related characteristics

Table 6 shows the cooperative-related characteristics of the surveyed sample.

Table 8. Cooperative-related variables (n=85 cooperatives)

Variable	Categories	%
Seniority	<5 years	38%
	5–10 years	42%
	>10 years	20%
Income (annual MAD)	<20,000 MAD	35%
	20,000–50,000 MAD	44%
	>50,000 MAD	21%
Market access	Local only	49%
	Regional/national/international	51%
Governance participation	Yes	37%
	No	63%

Source: Field survey (2024).

While about half of the cooperatives access regional or national markets, only 37% of women participate in governance bodies, pointing to persistent gender inequalities in decision-making.

4.3. Logistic regression results

The binary logistic regression model was applied to estimate the probability of women's empowerment (Y=1).

Table G. Logistic regression results (dependent variable: women's empowerment)

Variable	Odds Ratio (OR)	Std. Error	p-value
Education	2.15	0.34	0.000***
Seniority	1.42	0.28	0.012**
Market access	1.87	0.31	0.004***
Marital status	0.61	0.22	0.038**
Income	1.33	0.25	0.049**
Governance	2.72	0.39	0.000***
Location (rural=1)	0.89	0.27	0.521

Source: Author's calculation, SPSS v.27, Stata v.17.

Education, seniority, market access, income, and governance participation all have positive and significant effects on empowerment. Marital status shows a negative and significant effect, suggesting structural constraints linked to traditional gender norms. The territorial variable (rural vs. urban) is not statistically significant.

5. Discussion

5.1. Overview of findings

The results of the logistic regression provide strong evidence that women's empowerment within basketry cooperatives is influenced by a combination of individual characteristics (education, marital status), cooperative-related factors (seniority, income, governance, market access), and territorial conditions. While most determinants proved significant, the rural–urban variable showed no substantial effect, suggesting that empowerment depends more on institutional arrangements within cooperatives than on geography alone.

5.2. Validation of hypotheses

Table 10. Hypotheses validation based on regression results

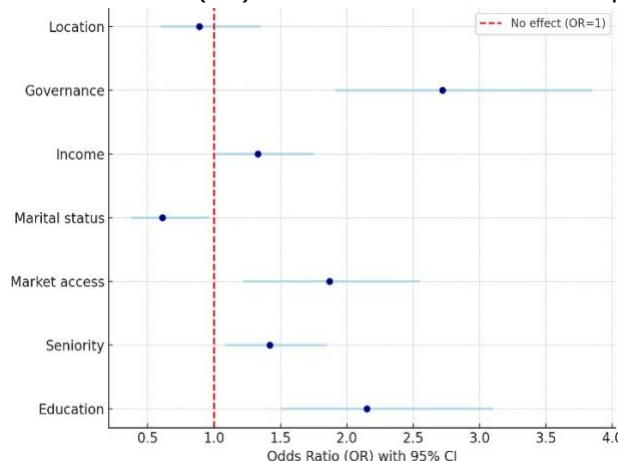
Hypothesis	Statement	Result	Validation
H_1	Education positively influences women's empowerment.	OR = 2.15; $p < 0.01$	Supported
H_2	Seniority in the cooperative increases empowerment.	OR = 1.42; $p < 0.05$	Supported
H_3	Market access significantly enhances autonomy.	OR = 1.87; $p < 0.01$	Supported
H_4	Marital status negatively affects empowerment.	OR = 0.61; $p < 0.05$	Supported
H_5	Participation in governance bodies fosters empowerment.	OR = 2.72; $p < 0.01$	Strongly supported

Source: Author's calculation, SPSS v.27, Stata v.17.

All five hypotheses (H_1 – H_5) are validated. Governance and education appear as the strongest drivers, while marital status remains a structural barrier.

5.3. Visualization of results

Figure 2. Odds ratios (OR) of determinants of women's empowerment



Source: Author's calculations based on field survey data (2024), processed with SPSS v.27 and Stata v.17.

Figure 2 illustrates the odds ratios (OR) and their 95% confidence intervals for the determinants of women's empowerment within basketry cooperatives. The results highlight the central role of education and governance participation, both showing $OR > 2$, confirming their strong contribution to enhancing women's autonomy. Market access, seniority, and income also have significant positive effects, reinforcing the idea that economic integration and cooperative experience are key empowerment drivers. Conversely, marital status appears as a constraint, with $OR < 1$, underlining the persistent weight of social norms. Finally, the rural/urban location variable crosses the reference line at $OR = 1$, indicating no statistically significant impact.

5.4. Discussion and Implications

The findings of this study converge with and extend existing research on women's empowerment within cooperatives, while providing original insights into the context of basketry cooperatives in the Marrakech-Safi region. Consistent with Ibourk and Hninou (2025), the results confirm the decisive role of education and cooperative seniority in enhancing women's autonomy, highlighting that both human capital and cooperative experience constitute crucial levers of empowerment. Similarly, Anderson et al. (2020) and Mayoux (2010) underline the importance of governance participation in fostering agency and leadership, a relationship that our empirical analysis strongly validates. In contrast, however, unlike the conclusions of FAO (2018) and Aberji (2022), our results show that territorial location (rural versus urban) is not a significant determinant of empowerment, suggesting that the institutional quality of cooperatives and women's active involvement in governance are more influential than geography in shaping empowerment outcomes. The negative effect of marital status corroborates Kabeer (2012) and Ferguson and Kepe (2011), who noted that entrenched gender norms remain a structural constraint on women's autonomy, even within cooperative frameworks. Conversely, the strong and significant role of market access supports the arguments of Boulkhir et al. (2025) and the OECD (2021), showing that integration into broader markets is a critical pathway to economic independence and cooperative sustainability.

Theoretically, these findings enrich the Capability Approach (Sen, 1999) by demonstrating that empowerment is rooted in a combination of resources (education, income, market access) and agency (governance participation), thereby confirming its multidimensional character. From a policy perspective, they highlight the need for programs such as the INDH and ODCO interventions to go beyond financial support and infrastructure by prioritizing education and governance training for women while addressing marital and cultural constraints that restrict autonomy. Managerially, the results suggest that cooperatives should strengthen women's access to decision-making bodies and external markets, thereby promoting not only economic independence but also the preservation of cultural heritage through the transmission of artisanal skills such as basketry. Overall, the discussion demonstrates that empowerment in women's cooperatives emerges from the interplay of institutional governance, education, and market integration, while still being limited by persistent socio-cultural barriers.

6. Conclusion

This study examined the role of women-only basketry cooperatives in the Marrakech-Safi region as drivers of both economic empowerment and cultural heritage preservation. By mobilizing a binary logistic regression model applied to a representative sample of 85 cooperatives and 340 women members, the research provided robust evidence that empowerment is shaped by a combination of individual factors (education, marital status), organizational dimensions (seniority, governance, income, market access), and institutional quality rather than territorial location. The findings clearly show that education and governance participation emerge as the most influential determinants, while marital status remains a structural constraint, reflecting persistent socio-cultural norms. Moreover, access to broader markets proved to be a critical pathway for strengthening women's agency and ensuring the long-term sustainability of cooperatives.

Theoretically, the results contribute to the advancement of the Capability Approach (Sen, 1999) by illustrating how empowerment depends not only on access to resources—such as income, education, and market opportunities—but also on agency, particularly through governance participation. This multidimensional perspective enriches the literature by bridging economic, social, and cultural dimensions of empowerment, showing that cooperatives function simultaneously as economic actors and custodians of intangible cultural heritage.

From a policy perspective, the study underscores the importance of reinforcing public initiatives such as the Initiative Nationale pour le Développement Humain (INDH) and ODCO programs. These should focus not only on financial and technical support but also on education, governance training, and market integration for women, while addressing the structural constraints linked to marital status and entrenched gender norms. Managerially, cooperatives should expand opportunities for women to participate in decision-making bodies and diversify their market outlets, thereby consolidating both their economic independence and their role in preserving artisanal traditions.

Nevertheless, the study is not without limitations. The reliance on cross-sectional data restricts the ability to capture long-term empowerment dynamics, while the focus on a single region limits the generalizability of results. Future research could adopt a longitudinal perspective and extend the analysis to other regions or sectors, while integrating qualitative approaches to better understand the cultural and social dimensions of empowerment.

In conclusion, women's basketry cooperatives in Marrakech-Safi demonstrate that empowerment is not a linear economic process but a multidimensional transformation driven by education, governance, and market integration, while constrained by persistent social norms. By simultaneously advancing women's autonomy and safeguarding cultural heritage, these cooperatives embody a hybrid model of social, economic, and cultural development, offering valuable lessons for both national policies and international debates on sustainable empowerment.

References

- [1] Aberji, Y. (2022). Women's cooperatives and empowerment in Morocco: Constraints and opportunities. *The Journal of North African Studies*, 27(4), 512–530. <https://doi.org/10.1080/13629387.2022.2028724>
- [2] Anderson, S., Choudhury, P., C Munshi, K. (2020). Collective action and women's empowerment: Evidence from cooperatives. *World Development*, 135, 105128. <https://doi.org/10.1016/j.worlddev.2020.105128>
- [3] Birchall, J. (2018). The governance of cooperatives and mutual associations: A global perspective. *Annals of Public and Cooperative Economics*, 85(1), 5–28. <https://doi.org/10.1111/apce.12134>
- [4] Boulkhir, L., Atitaou, A., Boubrik, A., C Touhami, F. (2025). From technological innovation to social innovation: The role of Moroccan women's cooperatives in the transition towards sustainable and inclusive territorial development. *International Journal of Research and Innovation in Social Science*, 5(2), 3143–3155. <https://doi.org/10.47772/IJRISS.2025.9020246>
- [5] Defourny, J., C Nyssens, M. (2017). *Fundamentals of social innovation and social enterprise*. Routledge. <https://doi.org/10.4324/9781315181318>
- [6] El Hilali, N., Aberji, Y., C Bouazza, A. (2023). Social and solidarity economy as a lever for cultural and economic sustainability in Morocco. *International Journal of Social Economics*, 50(3), 325–345. <https://doi.org/10.1108/IJSE-09-2022-0643>
- [7] FAO. (2018). *Empowering rural women through cooperatives*. Rome: Food and Agriculture Organization of the United Nations. <http://www.fao.org/3/i9136en/I9136EN.pdf>
- [8] Ferguson, J., C Kepe, T. (2011). Agricultural cooperatives and gendered social relations: Constraints in rural Africa. *Development Southern Africa*, 28(4), 537–550. <https://doi.org/10.1080/0376835X.2011.607988>
- [9] Ibourk, A., C Hninou, S. (2025). Empowering women through agricultural cooperatives: A multilevel analysis in Morocco's Marrakech-Safi region. *Discover Sustainability*, c, Article 559. <https://doi.org/10.1007/s43621-025-01245-2>
- [10] International Labour Organization (ILO). (2002). *Promotion of cooperatives recommendation*, 2002 (No. 1S3). Geneva: ILO. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R193
- [11] Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464. <https://doi.org/10.1111/1467-7660.00125>
- [12] Kabeer, N. (2012). *Women's economic empowerment and inclusive growth: Labour markets and enterprise development* (SIG Working Paper 2012/1). London: International Development Research Centre (IDRC) C DFID.
- [13] Malhotra, A., Schuler, S. R., C Boender, C. (2002). *Measuring women's empowerment as a variable in international development*. Washington, DC: World Bank.
- [14] Mayoux, L. (2010). Revisiting women's empowerment in development. *Development in Practice*, 20(2), 149–162. <https://doi.org/10.1080/09614520903564110>

- [15] Nussbaum, M. (2000). *Women and human development: The capabilities approach*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511841286>
- [16] OECD. (2021). *Social economy and women's empowerment: Market access and policy innovations*. Paris: Organisation for Economic Co-operation and Development. <https://doi.org/10.1787/9789264975604-en>
- [17] Sen, A. (1999). *Development as freedom*. Oxford: Oxford University Press.