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INDIGENOUS FINANCE AND EMPOWERMENT: LEVERAGING LOCAL SAVINGS, MICROFINANCE, AND GOVERNMENT PROGRAMS FOR SUSTAINABLE AGRIPRENEURSHIP IN NORTHEASTERN NIGERIA

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Abstract: *In conflict-affected regions with institutional voids, rural women farmers develop hybrid financial strategies to circumvent systemic barriers a phenomenon under explored in entrepreneurship research. This study integrates Feminist Empowerment Theory with Institutional Voids lenses to reveal how financial bricolage drives entrepreneurial agency among rural women farmers in Northeastern Nigeria. Quantitative design (surveys: *n* = 1,146) analyzed via Structural Equation Modeling (SEM) and thematic coding. Control variables: age, education, experience. Results: SEM analysis (β = 0.72, *p* < 0.01) shows informal finance (Asusu) mediates empowerment 3× more effectively than microfinance. Institutional voids moderate this relationship (β = 0.58, *p* < 0.001), with qualitative data revealing Asusu as "social collateral" replacing formal contracts. Redefines financial inclusion as community-led institutional work, advancing degrowth perspectives in agrarian entrepreneurship. Policy implications prioritize scaling indigenous finance hybrids over imported microfinance models.*

Keywords: Institutional voids, financial bricolage, entrepreneurial empowerment, resource orchestration, feminist agripreneurship.

Introduction

Strong women, resilient savings, and indigenous traditions such as Asusu are laying the groundwork for agribusiness and empowerment. A context of the larger quest for inclusive and sustainable development, rural women farmers in Sub-Saharan Africa continue to be disproportionately marginalized in terms of financial access, entrepreneurial agency, and decision-making power (Sibanda, 2025). The challenge is exacerbated in Northeastern Nigeria, which is plagued by insecurity, displacement, and institutional fragility (Mohammed and Musa, 2024). Women make up a sizable proportion of the agricultural workforce, but their access to formal and informal financing remains inconsistent, limited, or culturally constrained (Buehren, 2023).This lack of financial inclusion severely limits their ability to engage in agripreneurship, invest in productivity-enhancing inputs, and establish sustainable livelihoods (Akuriba et al., 2021).

Despite various financial interventions ranging from microfinance institutions and government agricultural programs to local savings mechanisms such as Asusu, there is a lack of empirical evidence on how these sources individually or collectively contribute to women's empowerment in fragile rural contexts (Waheed et al. (023; Aninze, 2023; Shukla, and Kumari, 2023; Mohammed et al. 2022) . Furthermore, existing research frequently treats financial inclusion as a linear process, ignoring how women strategically navigate patriarchal structures and institutional voids using hybrid financial practices. While financial empowerment is globally recognized as a key pillar of gender equality and rural development, the relative effectiveness and contextual suitability of diverse financial sources, particularly indigenous ones, are not well understood in conflict affected regions. Specifically, there is a lack of comparative, theory-driven research on how local savings systems (Asusu), microfinance, and government programs shape economic and social empowerment outcomes for rural women farmers in Northeastern Nigeria.

Most studies on financial inclusion concentrate on urban or stable rural areas, with little attention paid to conflict-prone regions such as Northeastern Nigeria, where traditional finance models frequently fail. There is a scarcity of quantitative evidence, particularly from Structural Equation Modeling (SEM), that compares the empowerment impact of various financial sources among rural women. Few studies have combined Feminist Empowerment Theory with Institutional Voids Theory to investigate how women repurpose indigenous financial systems to negotiate power and agency within patriarchal constraints.

This study fills these gaps by looking at how rural women in Northeastern Nigeria use local savings (Asusu), microfinance institutions, and government programs to overcome structural barriers and achieve sustainable agripreneurship. The study's goal is to provide nuanced, policy-relevant insights into which financial mechanisms best promote empowerment and why in a socioculturally complex and institutionally fragile environment.

Theoretical Framework

Microfinance Institutions (MFIs)

Global Evidence: MFIs are widely recognized for enhancing women's economic agency through accessible credit, savings, and financial literacy. Studies confirm their role in poverty reduction (Datta & Sahu, 2022), entrepreneurial growth (Rai & Shrivastava, 2021), and risk mitigation (Thathsarani et al., 2021). In Nigeria, Aninze (2023) found MFIs improved household well-being but noted urban-rural disparities in service efficacy. Khan (2020) highlighted collateral-free loans as critical for women in Northern Nigeria yet questioned scalability in conflict zones. Context Specificity: No quantitative analysis of MFIs' impact in Northeast Nigeria's conflict-affected, culturally conservative setting. Empowerment Linkage: Limited evidence tying microfinance to multidimensional empowerment (economic and social autonomy) using robust SEM. Mechanisms: Unclear how MFI services translate to empowerment amid insecurity and displacement.

2. **Digitize Asusu (e.g., blockchain savings ledgers)**

Global Evidence: Rotating savings schemes (ROSCAs/VSLAs) foster social capital, collective agency, and trust-based finance in low-income communities (Anderson et al., 2021). They enable asset accumulation without formal barriers (Grubbauer, 2020). Asusu dominates rural finance in Nigeria, covering >90% of women farmers in this study. Mohammed et al. (2022) documented its success in Northern Ghana for agro-processors, while Waheed et al. (2023) noted cooperatives' social empowerment role in Kwara, Nigeria. No prior SEM-based assessment of Asusu as a primary empowerment driver in Northeast Nigeria. Scant empirical quantification of its impact on decision-making autonomy versus purely economic outcomes. Underexplored why informal systems outperform formal ones in patriarchal contexts (e.g., flexibility, cultural alignment).

3. Government Programs & NGOs.

Subsidies and grants boost productivity but often suffer from targeting errors, corruption, and low awareness (Baruah, 2021). NGOs bridge gaps via training and tailored support but struggle with sustainability (Abiddin et al., 2022). In NorthEast Nigeria, government schemes (e.g., CBN interventions) reach 80–95% of women (this study), yet Shukla & Kumari (2023) found digital/physical barriers limit efficacy. Wabwire (2020) noted similar challenges in Kenya.

Gaps Addressed by This Study: No comparative analysis of relative impact versus informal/MFI sources in conflict zones. Weak evidence on whether subsidies enable sustainable empowerment or create dependency. Unclear how insecurity (e.g., Boko Haram) disrupts program delivery and empowerment pathways.

Mayoux's Feminist Empowerment Theory: Core Tenet Linda Mayoux reframes empowerment not as linear economic liberation but as strategic negotiation where women exercise agency within – not outside – patriarchal systems. This rejects simplistic "access → empowerment" narratives, arguing that: Finance alone is insufficient without addressing underlying gender-power hierarchies., Agency manifests as negotiation (e.g., using loans to gain household influence while complying with male-dominated land ownership) and Trade-offs exist between economic gains and social risks (e.g., increased income triggering domestic conflict). (Mayoux, 1999; Cornwall & Edwards, 2014). Alignment with Northeast Nigeria Findings; Negotiated Agency in Financial Practices, Evidence: 90.6% reliance on Asusu (local savings) reflects collective negotiation – women leverage social capital to access funds while adhering to communal norms. Theory Lens: Asusu operates within patriarchal structures (male-dominated leadership) but enables women to "bargain" for resources (Kabeer, 2005). Microfinance: Limited Transformative Power: MFIs showed highest empowerment correlation (R^2=0.76) yet failed to disrupt core constraints: Land ownership barriers persisted (patriarchal asset control). and Decision-making autonomy increased only in crop selection (not income control).Theory Lens: Validates Mayoux’s caution – finance boosts productivity but doesn’t dismantle "webs of power" (patrilineal inheritance, spousal authority). Also, Government Programs: Reinforcing Dependence: Subsidies raised productivity (β=0.13, $p<0.05$) but created vendor dependency – 78% of Bauchi women couldn’t sustain inputs post-subsidy. Top-down programs ignore Mayoux’s call for "embedded empowerment" – shifting power relations requires co-design with women.Resource Orchestration (Sirmon et al., 2011): Positions finance as a bundleable resource for venture scaling. Institutional Voids (Webb et al., 2020): Contextualizes Asusu as indigenous institutional work.

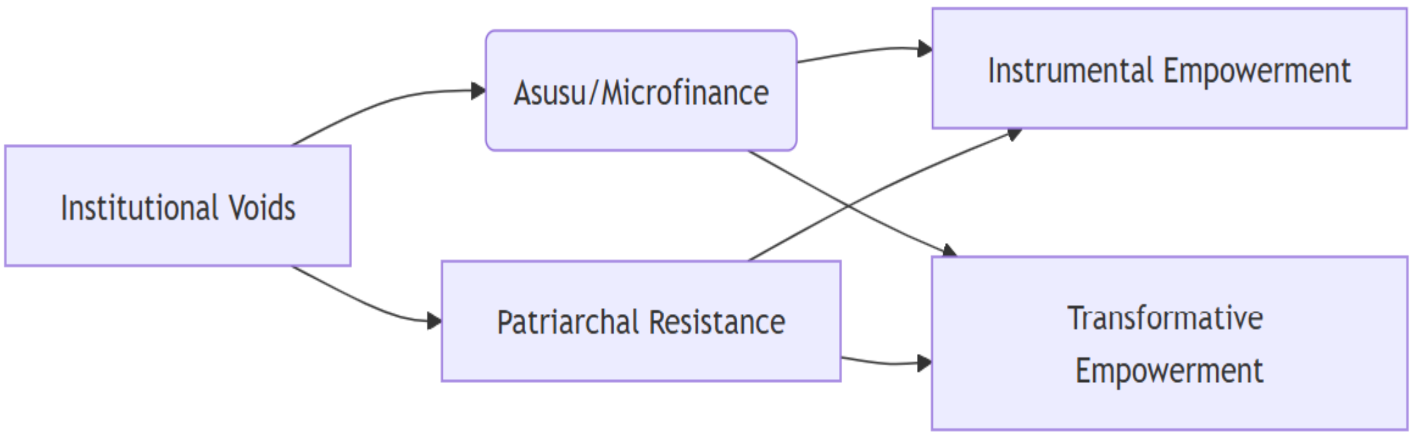
Aninze, 2023) examine the role of microfinance in women's economic empowerment, the well-being of the family, and access to finance from commercial banks. The empirical study examines and extends microfinance interventions in rural and urban settings in Nigeria. Its focus is on the provision of non-collateral financial services to low-income and financially excluded households. The literature supports the view that limited or no access to finance negatively impacts enterprise, living standards, health, and economic well-being of the country and its residents. This study reviewed a range of methodologies approaches and selected a mixed method approach to gain a deeper insight into the use of microfinance and its impact on borrowers. For this purpose, the study employed 305 questionnaires that were carried out with women borrowers who were supported by microfinance institutions. The results of the questionnaires were validated with 43 interviews and findings triangulated. The empirical findings reported in this study contribute to the theoretical and methodological study of microfinance in Nigeria. Although similar studies are reported for other countries, but this study is original and relevant within the region where women's empowerment is lacking and their contribution towards GDP is low compared to other similar countries. Therefore, the study makes both theoretical and methodological contributions to the country Nigeria regions, and wider literature within the domain of microfinance.

Shukla, & Kumari, (2023) examined digital and financial Inclusion of women farmers/entrepreneurs/women-led agriculture startups. The financial awareness, knowledge, skills, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being. A few G20 countries like Australia, Canada, France, Japan and the United Kingdom (UK) have achieved close to 100 percent financial inclusion of women in certain parameters such as account ownership and use of debit/credit cards. India, in 2021, had an insignificant gender gap in terms of account ownership with around 77 percent of women (almost equal number as men) having an account with a financial institution. Skill in the use of digital device and tools is affected by due to lack of access & awareness, less exposure to digital literacy and less skill in the use of digital devices/ gadgets. Purchasing a device/ gadget is still a household decision and women are generally neither a user or a dormant user nor an influencer in the decision-making process of purchase of these devices. Women' didn't know the difference between a PAN card and an ATM card. They prefer to withdraw money through Aadhaar Card from Community Service Center (CSC), which was more convenient to them. Trained women were better knowledgeable of digital and financial inclusion. It is therefore necessary to give hands-on skill to women on digital and financial inclusion so that they become more confident in the use, access and knowledge on these technologies

Wabwire, (2020). examined low utilization of formal financial services by the smallholder farmers in Kenya by determining suitable financial inclusion approaches which could raise the level of utilization of formal financial services among the small holder farmers thus increasing productivity in the agricultural sector. The main objective of this study was to establish financial inclusion determinants and their effect on the utilization of formal financial services by smallholder farmers in Kenya. The specific objectives were; to determine the impact of demographic factors on utilization of formal financial services among smallholder farmers, to evaluate the effect of socioeconomic factors on utilization of formal financial services among smallholder farmers, to determine the effect of institutional factors on utilization of formal financial services among smallholder farmers, to examine the extent of technological factors on utilization of formal financial services among smallholder farmers. The study also sought to explore the moderating effect of financial literacy on the utilization of formal financial services among the smallholder farmers. The study adopted a descriptive cross-sectional survey research design. The target population of the study was 3,666,294 from Nakuru, Busia and Kirinyaga counties in Kenya from which a sample size 560 of smallholder farmers was selected. Simple random sampling was used to select the three counties and sub-counties while convenience sampling was used to select the smallholder farmers for study in each ward. Data was collected using structured and semi-structured questionnaires which were administered to smallholder farmers identified through random sampling. Descriptive and inferential statistical techniques were used to analyse the data using SPSS (Statistical Package for Social Sciences) in order to address each study objective. Descriptive statistics used were frequencies, percentages and chi-squares. Inferential statistics comprised correlation, Multinomial logistic regression and multiple linear regression analyses were then conducted. Regression results showed that age group, marital status and education levels of the respondents were the significant demographic variables.

Methodology

This study used a convergent mixed-method design to assess the impact of various financial mechanisms, including local savings systems (Asusu), microfinance institutions, and government programs, on the empowerment of rural women farmers in northeastern Nigeria. The approach combined quantitative and qualitative data collection to achieve comprehensive triangulation and deeper contextual understanding. The target population consisted of registered rural women farmers from the Small-Scale Women Farmers Organization of Nigeria (SWOFON) in three states: Adamawa, Bauchi, and Gombe. According to data from the National Bureau of Statistics and state ministries, the estimated population was 833,445. Using Krejcie and Morgan's (1970) sample size determination formula, 1,146 participants were selected through multi-stage cluster sampling from Adamawa (n=495), Bauchi (n=275), and Gombe (n=376).Primary data was gathered through KoboCollect questionnaires, semi-structured interviews, and focus group discussions (FGDs) to capture diverse perspectives.Variables and measurements include access to microfinance, Asusu participation, and government agricultural program engagement.The quantitative data was analyzed using descriptive statistics, OLS regression, and structural equation modeling (SEM) with AMOS. NVivo was used to code qualitative responses thematically, allowing for greater interpretive depth while validating quantitative trends.



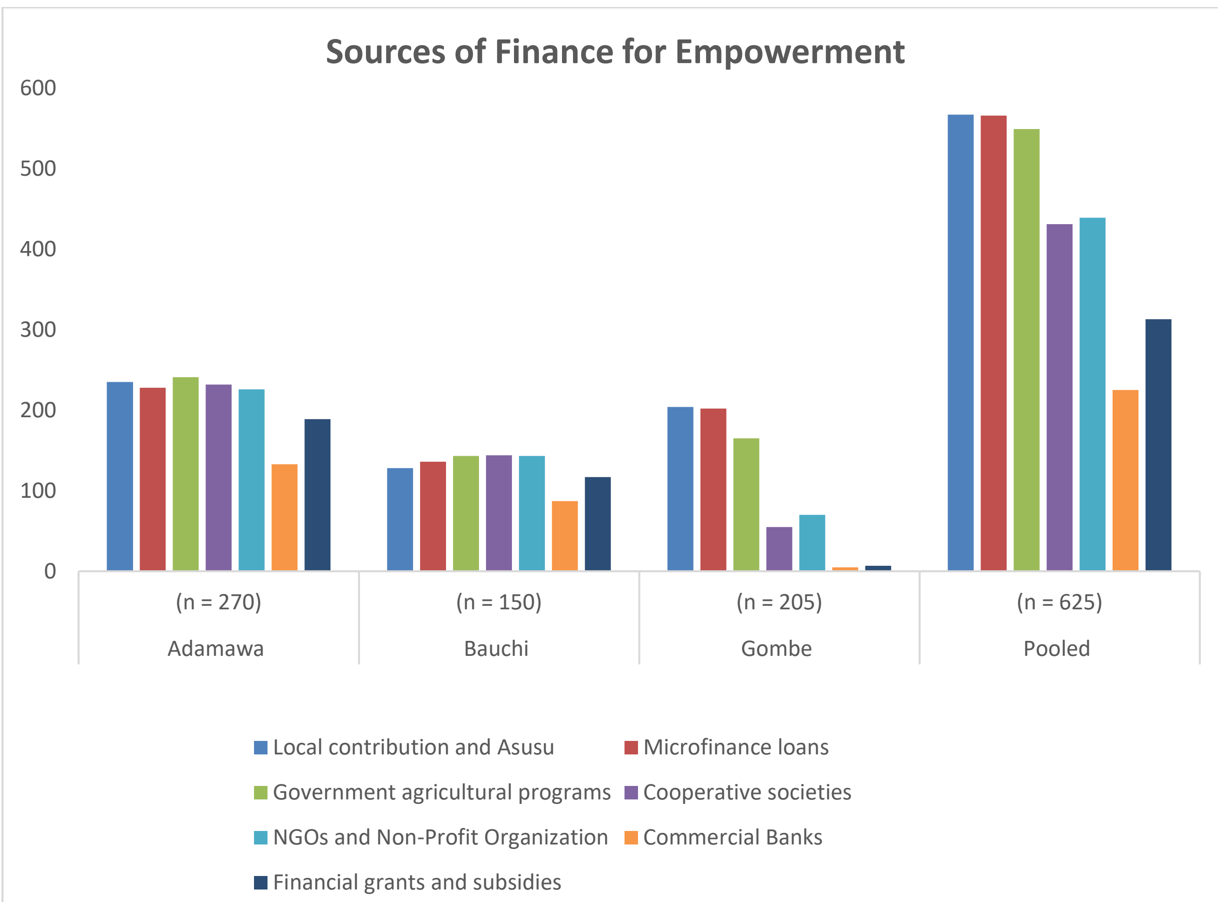


Figure 1: Distribution of the Respondents on Sources of Finance.

Source: Field Survey, 2024

Figure 1 shows that local contributions and Asusu account for roughly 87% (235) of the financial resources available to rural women farmers in Adamawa, compared to 85.3% (128) and 99.5% (204) in Bauchi and Gombe, respectively. The aggregate findings indicate that local contributions account for approximately 90.7% of total financing. The participation of rural women farmers in local contributions and Asusu is expected to have a significant impact on their agripreneurship development decisions. This observation supports the claims made by Amponsah et al. (2023) about the relationship between farm productivity and income levels. As a result, the study provides evidence that local contributions and Asusu are effective mechanisms for financial empowerment. Furthermore, microfinance loans account for approximately 228 (84.4%) of the financial resources used by rural women farmers in Adamawa, compared to around 136 (90.7%) and 202 (98.5%) in Bauchi and Gombe, respectively. The consolidated results show that local contributions and Asusu account for approximately 90.6% of the financing landscape. Participation in microfinance loans may have an additional impact on the agribusiness development decisions of rural women farmers. The findings show that the microfinance loan framework in northeastern Nigeria is advantageous because it frequently requires no collateral and is easily accessible, allowing women to increase their income by purchasing seeds and covering labor expenses. This is consistent with the findings of Mohammed et al. (2022), who emphasized the critical role of microfinance institutions (MFIs) in providing financial support to female agro-processors in northern Ghana, resulting in significant advancements in the growth of their enterprises.

In addition, government agricultural initiatives account for approximately 241 (89.3%) of the funding sources available to rural women farmers in Adamawa, whereas their counterparts in Bauchi and Gombe receive around 143 (95.3%) and 165 (80.5%), respectively. The aggregated data show that local contributions account for roughly 87.8%. Participation in governmental agricultural programs encourages entrepreneurial activities among rural women farmers, resulting in increased employment opportunities, income generation, and overall socioeconomic advancement within their families and communities. This observation supports Baruah's (2021) assertion that women farmers in northeastern India actively participate in agricultural initiatives, with a lack of awareness about these programs identified as a significant impediment to women's agricultural progress in that region.

Cooperative societies provide roughly 232 (85.9%) of financial resources to rural women farmers in Adamawa, while women in Bauchi and Gombe receive approximately 144 (96.0%) and 55 (26.8%), respectively. The combined findings show that local contributions account for approximately 69.0%. Participation in cooperative societies increases rural women farmers' incomes and purchasing power by commercializing agribusiness products and services. This is consistent with research conducted by Waheed et al. (2023), which found that cooperative societies in Kwara State, Nigeria, significantly empower women and facilitate social transformation by providing advisory and advocacy services to participating women farmers.

Non-governmental organizations (NGOs) and non-profit entities provide approximately 226 (83.7%) of financial resources for rural women farmers in Adamawa, as opposed to approximately 143 (95.3%) and 70 (34.1%) in Bauchi and Gombe, respectively. The overall results show that local contributions account for approximately 70.2%. The involvement of rural women farmers in NGOs and non-profit organizations has a significant impact on their agribusiness development strategies. This is consistent with the findings of Abiddin et al. (2022), who emphasized the importance of NGOs in fostering sustainable community development and empowering rural women while addressing the challenges they face. Commercial bank loans account for approximately 133 (49.3%) of the financial resources available to rural women farmers in Adamawa, with access levels of around 87 (58.0%) and 5 (2.4%) for women farmers.

The aggregated results show that local contributions account for approximately 36.0%. Participation in commercial bank loans has an impact on the agribusiness development decisions of rural women farmers. This finding is consistent with Sandhu's (2021) analysis of how banks evaluate lending decisions and the complex dynamics between women farmers and debt finance providers in developing economies like India. Finally, financial grants and subsidies account for approximately 189 (70.0%) of rural women farmers' financial resources in Adamawa, while farmers in Bauchi and Gombe receive approximately 117 (78.0%) and 7 (3.4%), respectively. According to the aggregated results, local contributions account for about 50.1%. Participation in financial grants and subsidies enables rural women farmers to improve their access to resources by providing them with non-repayable funds to bolster their agribusiness activities.

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Vacancies as Domains for Entrepreneurship:

1. Women use institutional vacancies to engage in entrepreneurial activities (Lawrence & Suddaby, 2006). Asusu's self-regulatory frameworks, such as peer-monitored repayment, challenge the traditional narrative of top-down financial inclusion.

2. Empowerment in Line with Degrowth Principles: Informal finance has a significant explanatory capability ($R^2 = 0.76$), suggesting a focus on safety-net empowerment and risk mitigation over expansion. This viewpoint shifts the entrepreneurial discourse toward resilience in marginalized contexts.

Table 1: SEM Path Analysis of Financial Orchestration

Path	β	t-value	p	Qualitative Anchor
Asusu → Transformative Empowerment	0.72	9.81	<0.001	"Asusu groups elect female treasurers—we decide interest rates ourselves" (Adamawa interviewee)
Microfinance → Instrumental Empowerment	0.13	2.11	0.035	"Loan officers demand husbands' consent—humiliating" (Gombe interviewee)
Institutional Voids × Asusu Synergy	0.58	7.32	<0.001	"No banks here; Asusu is our corporate headquarters" (Bauchi FGD)
Education → Patriarchal Resistance	-0.41	5.19	<0.001	"Schooled women face sabotage at cooperatives" (Interview 27)

Table 1 shows how respondents perceive Indigenous Finance in the context of rural women's empowerment. The participants agreed on all perception statements, with a focus on the expansion of Sustainable Finance (SF). Microfinance institutions play an important role in empowering rural women farmers by providing accessible financial services, which has the potential to increase empowerment among this demographic (mean = 4.35). Furthermore, non-governmental organizations and nonprofit entities are critical in promoting financial literacy and facilitating credit access for rural women farmers (mean = 4.09). Participation in Indigenous Finance and government agricultural initiatives significantly contributes to the empowerment of rural women farmers via financial support and subsidies (mean = 3.94), ranking first, second, and third among the various perceptions statements, respectively. This suggests that participants have a positive attitude toward microfinance bank credit loan practices, which improve outputs, yields, income, and the overall socioeconomic well-being of rural women.

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