

The Role of Programme Content of Mang'elele FM Community Radio in Promoting Economic Development in Makueni County, Kenya

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Abstract

The study investigated the role of Mang'elele FM's programme content, Kenya's first community radio station, in fostering economic development in Makueni County, a rural region with a 64.1% poverty rate. Grounded in participatory development communication theory, the research examines how locally relevant, Kamba-language content addresses socio-economic challenges like poverty, unemployment, and agricultural constraints. A mixed-methods approach was employed, involving 260 listener respondents and seven key informants who included content producers and senior management. Findings reveal that the majority of listeners perceive Mang'elele FM's content as economically empowering through education, advocacy for service delivery and community engagement. However, limitations such as inadequate expert involvement, leadership disputes, a deficit in a more participatory content development and restrictive regulations limit its potential. The study recommends enhancing professional input, increasing community participation, and advocating for supportive policies. This study affirms community radio's role in advancing Sustainable Development Goal 8, which aims at attaining decent work and economic growth in rural contexts, offering a model for other developing regions.

Keywords: *Community Radio, Economic Development, Programme Content, Participatory Development Communication, Rural Poverty*

1.0 Introduction

In this study, economic development is defined as measurable progress toward Sustainable Development Goal 8 (decent work and economic growth), operationalized through indicators such as reduced poverty rates (below \$2.15/day), increased employment (beyond 58.8% in agriculture), improved per capita income (above \$804.33), and enhanced access to infrastructure and services like water, healthcare, and markets (UNDP, 2022; World Bank, 2018). Economic empowerment refers to individuals perceived and actual gains in skills, knowledge, and resources for economic participation, measured via survey-reported improvements in financial literacy, business startups, market access, and income levels.

In rural areas of developing nations, where access to information and communication technologies (ICTs) is limited, community radio serves as a critical platform for disseminating knowledge, fostering dialogue, and promoting socio-economic development. In Kenya, where 68.9% of the population resides in rural areas according to the Kenya National Bureau of Statistics (KNBS, 2019), community radio stations like Mang'elele FM in Makueni County play a pivotal role in addressing local challenges. Makueni County, characterized by arid and semi-arid landscapes, faces significant economic hurdles, including 64.1% of its population living below the international poverty line of \$2.15 per day (World Bank [WB], 2018).

Marginalized rural populations face exclusion due to information asymmetries (UNDP, 2022), underscoring the need for platforms like Mang'elele FM to bridge gaps with locally relevant content. Agriculture, the backbone of the local economy, employs 58.8% of residents, yet

perennial issues such as drought, unemployment, and limited infrastructure hinder progress toward economic sustainability.

Mang'elele FM, established in 2004 as Kenya's first community radio, operates under the slogan "wasya wa maeendeyo" (voice of development). Its mission is to empower the community through information and educational programs, particularly targeting women and marginalized groups. This study focuses on the role of Mang'elele FM's programme content in spurring economic development, addressing the research question: What is the role of the programme content of Mang'elele FM community radio in attaining economic development in Makueni County? Grounded in participatory development communication theory, which emphasizes dialogue and stakeholder engagement, the study explores how content tailored to local needs fosters economic empowerment and aligns with Sustainable Development Goal 8 (decent work and economic growth). To achieve this purpose, the specific objectives are:

- i. To examine the relevance and quality of Mang'elele FM's programme content in addressing local economic challenges.
- ii. To assess listeners' perceptions of the content's impact on economic empowerment, such as through education and advocacy.
- iii. To identify barriers to content effectiveness and recommend strategies for enhancement.

This research provides a replicable model for leveraging community radio to address rural poverty. By analyzing Mang'elele FM's programme content, the study contributes to the broader discourse on the media's role in development, offering insights for policymakers,

media practitioners, and development stakeholders.

Literature Review

Community Radio and Economic Development

Community radio is distinguished by its community-driven ownership, non-profit orientation, and focus on local issues (Amadu, 2025). Unlike commercial or public radio, it prioritizes marginalized voices, fostering dialogue between communities and service providers. In rural contexts, where access to other media is limited, radio’s affordability and portability make it a powerful tool for disseminating information on agriculture, health, and governance as per (United Nations Development Programme (UNDP, 2017). Studies, such as Jallo (2012), highlight community radio’s role in empowering farmers and women by providing platforms to discuss economic challenges and access market information.

“This study concludes that Mang’elele FM’s programme content suggests a perceived contribution to economic development in Makueni County through educative platforms”

According to the Kenya National Bureau of Statistics (KNBS, 2018), radio is the most accessible medium in Kenya, with 95% of rural households owning a radio set. Community radio’s use of vernacular languages enhances its reach and relevance, enabling it to address place-specific issues like drought-resistant farming or local governance (Anduvate, 2014). However, the effectiveness of community radio depends on the

quality and relevance of its content, which must resonate with listeners’ socio-economic realities.

Gaps in Existing Literature

While existing literature shows community radio’s general potential in promoting economic development and resilience in rural African contexts, there is a notable gap in explaining how programme content can be specifically tailored to address the unique socio-economic challenges of arid, agriculture-dependent regions like Makueni County, where poverty rates exceed 64%. For instance, studies such as Wachira (2024) and Kough (2022) detail community radio’s role in enhancing social and economic development during crises like COVID-19 in Kenyan rural areas, but they primarily address broad empowerment outcomes without delving into nuances of language content for poverty-stricken agricultural communities facing drought and low productivity.

Similarly, Adebayo et al. (2022) and Amadu (2025) examine the economic empowerment of youths and identity construction in South African and Ghanaian rural settings, highlighting participatory mechanisms and civic engagement, yet they overlook the integration of professional expertise. Baú and Omondi Owiso (2025) and Mzava (2025) provide insights into cultural negotiation and participatory development in Kenyan refugee camps and Tanzanian rural areas, but lack empirical, context-specific analyses of how content quality influences measurable economic indicators, such as income improvement, market access, or advocacy for infrastructure in high-poverty semi-arid zones. The research addresses these gaps by conducting a mixed-methods analysis of Mang’elele FM’s programme content, evaluating its alignment with Makueni’s specific economic needs, and

demonstrating how enhanced participatory and professional elements can bridge the divide between theoretical potential and practical economic empowerment.

Participatory Development Communication Theory

Participatory development communication theory, rooted in audience-centered communication, posits that effective development requires dialogue between communities and stakeholders (Waisbord, 2020). This theory emphasizes feedback loops, where listeners actively contribute to content creation and decision-making, ensuring that media aligns with community needs. In the context of community radio, this involves broadcasting in local languages and addressing issues like poverty, gender inequality, and agricultural productivity. The theory advocates for inclusivity of audience in programming of content for community radio thus responsiveness to the needs of the community.

Content and Economic Empowerment

Programme content is the cornerstone of community radio’s impact. Locally place-specific content that is professionally prepared and delivered in an accessible language can empower communities by raising awareness, educating, and mobilizing action (Ziz et al., 2021). For example, programmes on agribusiness can enhance farmers’ knowledge of modern techniques, while advocacy-focused content can pressure service providers to address local needs, such as water shortages or healthcare access. However, challenges like limited expert involvement and resource constraints often limit content quality (Ziz et al., 2021).

Previous research on community radio in Africa, such as studies in Ghana and South Africa,

demonstrates its potential to reduce poverty by connecting communities with government services and NGOs (Myers, 2011). Yet, gaps remain in understanding how specific programme content influences economic outcomes in unique rural settings like Makueni, where agriculture dominates and poverty is acute. This study addresses this gap by examining Mang’etele FM’s content and its impact on economic development.

2.0 Materials and Methods

Research Design and Approach

The study adopted a mixed-methods analytical design to explore the relationship between Mang’etele FM’s programme content and economic development. The study looked at the correlation and efficacy analysis of Mang’etele FM programme content and economic development in Makueni County. Qualitative methods captured listener perceptions and content creation processes, while quantitative methods provided empirical data on listenership, income levels, and programme preferences. The dependent variable (DV) was economic empowerment (composite score from survey items on income, skills, access, and poverty reduction). Predictor variables (IVs) included listenership frequency, programme engagement (e.g., calls/texts), and exposure to advocacy-focused content (measured via self-reported frequency). This complementary approach ensured robust, unbiased findings, addressing the limitations of each method (Creswell, 2014).

Study Location

Makueni County, located in Kenya’s semi-arid southeast, spans 8,008.9 km² and has a population of 987,653 (KNBS, 2019). With a poverty rate of 64.1%—well above the national average of 45.9%—and a GDP per capita of \$804.33

according to the World Bank (WB, 2018), Makueni relies heavily on agriculture, which occupies 58.8% of residents (Kaggikah, 2017), though challenges like drought are compounded by limited infrastructure, making community radio a critical intervention tool. Agriculture dominates, with 58.8% of residents engaged in farming or pastoralism, yet frequent droughts and limited infrastructure exacerbate poverty. Agriculture dominates with 58.8% engagement in farming/pastoralism, yet droughts and infrastructure limits exacerbate poverty.

Study Population and Sampling

The study targeted 800 Mang'elele FM listeners who actively engage with the station through calls, texts, or outreach programmes. Producers at Mang'elele FM provided the listener count as key informants. Using Yamane's formula ($n = N / (1 + N(e^2))$), where $N = 800$, $e = 0.05$), a sample size of 267 listeners was determined. Seven key informants (five presenters and two management staff) were purposively selected for their role in content creation. Simple random sampling ensured equal representation of listeners, while purposive sampling targeted staff with direct involvement in programming.

Data Collection

Data was collected from May to December 2021 using semi-structured questionnaires for 260 listeners (97.4% response rate) and structured interviews of seven key informants. Questionnaires assessed demographics, programme preferences, and perceived economic impacts, with options for open-ended responses in the Kamba language to accommodate local dialects. Questionnaires assessed demographics, preferences, and impacts with open-ended Kamba responses. Economic empowerment, the main outcome variable, was operationalized through

Likert-scale survey items measuring perceived improvements in measurable terms: (1) income increases (e.g., from farming or businesses), (2) skill acquisition for employment or entrepreneurship (e.g., agribusiness techniques), (3) access to services/markets (e.g., government programs, loans via SACCOs), and (4) reduced poverty indicators (e.g., better food security). These were aggregated into a composite score (0-20) for quantitative analyses, combining perceptions with self-reported changes tied to radio-influenced actions. Interviews explored content creation for programmes, professional qualifications, and operational challenges. Interviews explored content creation, qualifications, and challenges. A pilot study in Makueni validated the instruments' clarity and suitability.

Data Analysis

Qualitative data were coded and categorized to identify themes related to programme content, language use, and economic empowerment. The coding process involved thematic analysis: initial open coding to identify patterns (e.g., empowerment themes from transcripts), followed by axial coding to group into categories (e.g., education, advocacy), with inter-coder reliability checked via 20% overlap ($\kappa=0.82$). Quantitative data were analyzed using descriptive statistics (frequencies, percentages) and presented in tables and figures. An explanation-building approach, per Yin (2014), established links between content and economic outcomes while addressing rival interpretations for validity. An explanation-building approach, per Yin (2014), explored associations between content and economic outcomes while addressing rival interpretations for validity. Assumptions for correlation/regression were tested: normality (Shapiro-Wilk test, $p>0.05$ for DV), linearity

(scatterplots), homoscedasticity (Breusch-Pagan test, $p > 0.05$), and no multicollinearity ($VIF < 5$).

Correlation and Efficacy Analysis

This study utilizes collected field data to perform a correlation and efficacy analysis of Mang’etele FM’s programme content and its economic impact in Makueni County, Kenya. Using quantitative data from 260 respondents (41.5% with secondary education, 40.8% in farming, 54.2% earning KSh 6,000–9,000, Demographics are detailed in Results; here, economic empowerment was operationalized as the composite survey score (described in Data Collection), serving as the dependent variable. Predictor variables included listenership (daily hours), engagement (interaction frequency), and advocacy exposure (programme-specific scale). Pearson correlations assessed bivariate relationships. Results showed $r = 0.45$ (95% CI [0.35, 0.54], $p < 0.05$) for listenership-empowerment and $r = 0.28$ (95% CI [0.16, 0.39], $p < 0.05$) for income-engagement. Regression analysis further showed that advocacy-focused content significantly predicts economic outcomes ($\beta = 0.62$, 95% CI [0.52, 0.72], $p < 0.01$), aligning with the study’s mixed-methods approach. Regression used advocacy exposure as the key predictor. The model was specified as simple linear regression: $Empowerment = \beta_0 + \beta_1(Advocacy) + \epsilon$, using SPSS v26 with stepwise entry ($p < 0.05$ for inclusion).

Ethical Considerations

Ethical approval was obtained from Rongo University and the National Commission for Science, Technology and Innovation. Respondents provided informed consent, with the option to withdraw without consequences. Anonymity was ensured, and data was used solely for academic purposes.

3.0 Results and Discussion

Listener Demographics and Programme Preferences

Among 260 respondents, education levels were 35% primary, 41.5% secondary, and 23.5% tertiary (Table 1); occupations were farming (40.8%), farming/pastoralism (17.7%), casual labor (11.5%), and small business (30%) (Table 2); incomes were low, with 38.1% at KSh 500–5,000, 54.2% at 6,000–9,000, and 7.7% above 10,000 (Table 3). The 11.6% unemployment rate in Makueni County, rising nationally to 10.40% in 2020 (Trading Economics, 2020), underscores the economic vulnerability addressed by Mang’etele FM’s agricultural focus, which supports 58.8% of residents (Kaggikah, 2017), though leadership disputes hinder its full potential.

Table 1
Distribution of Respondents by Education Level

Education Level	Percentage
Primary	35.0
Secondary	41.5
Tertiary	23.5
Total	100

Table 2
Occupation of Respondents

Occupation	Frequency	Percent
Farming	106	40.8
Farming and Pastoralism	46	17.7
Casual Labor	30	11.5
Small Business	78	30.0
Total	260	100.0

Table 3
Approximate Monthly Income of Respondents (Ksh) {1\$ = Ksh129.50}

Income Range (Ksh)	Percentage (%)
500-5,000	38.1
6,000-9,000	54.2
Above 10,000	7.7
Total	100

Economic-themed programmes aired at Mang’elele FM

Mang’elele FM airs five daily programmes (Morning Show, Work Time Show, Entertainment Hour, Evening Drive, Night Show), with 88.5% regular listenership; Morning and Night Shows were most popular (28.3% each) due to routine alignment (Table 4). The Kamba language was key, with 81.9% finding content understandable, while Maasai and Swahili programmes served minorities (Table 5).

Table 4
Respondents' Preferences for Mang’elele FM Programmes

Programme	Percentage (%)
Morning Show	28.3
Night Show	28.3
Work Time Show	21.7
Evening Drive	8.7
All Shows	13
Total	100

Table 5
Understandability of Language and Terms Used

Language	Percentage (%)
Kamba	81.9
Other (Maasai, Swahili)	18.1
Total	100

Role of Programme Content in Economic Development

Mang’elele FM’s content addresses economic challenges through education and advocacy. Of respondents, 88.5% reported economic empowerment from content aired, with 53.5% citing educative programmes (e.g., agribusiness techniques) and 35% valuing information dissemination (e.g., market prices, government services). The Evening Drive programme focused on water, health, education, and poverty, with programmes tailored to local economic

challenges. The creation of the programmes was associated with incorporating feedback from participatory engagement between key informants and active listeners. This was perceived to contribute to outcomes such as:

Evening Drive programme focused on water, health, education, and poverty, yielding outcomes such as: Health: A county government healthcare plan (\$3.86/year) and Nthongoni dispensary upgrade. - Source: Key Informants (K1)

Water: Boreholes drilled in Katheka Kai and Chyullu. Agriculture: NGO-provided drought-resistant crops (e.g., green grams). Security: National government police posts and KSh 96.5 million (\$745,173) in wildlife compensation (2016–2019). - Source: Key Informants (K4, K5, K7)

Programmes promoted financial literacy, leading to Savings and Credit Co-operative (SACCO) societies and table banking groups, facilitating loans for small businesses and farming." - Source: Key Informants (K2, K3, K6)

Listener Feedback on Content Improvement

Listeners provided insights on how the content aired on Mang’elele FM could be refined to empower them economically. Despite its impact, 55.8% of respondents suggested improving programme quality, 25.8% called for more expert guests (e.g., agricultural officers), 12.2% recommended longer programme durations, and 6.2% criticised excessive presenter talk time (Table 6). These findings highlight a demand for professional, focused content which mirrors the specific economic challenges facing Makueni County.

Table 6

Suggestions for Improving Programme Content

Suggestion	Percentage (%)
Improve programme quality	55.8
Include more experts	25.8
Increase programme duration	12.2
Reduce presenter talk time	6.2
Total	100

Inferential Analysis

Pearson correlations showed a moderate positive association between listenership and perceived economic empowerment ($r = 0.45$, 95% CI [0.35, 0.54], $p < 0.05$), indicating that higher listenership

is linked to greater empowerment perceptions, and a weak positive association between income and programme engagement ($r = 0.28$, 95% CI [0.16, 0.39], $p < 0.05$), suggesting limited ties between earnings and interaction. Regression analysis revealed that exposure to advocacy-focused content significantly predicts economic empowerment ($\beta = 0.62$, 95% CI [0.52, 0.72], $p < 0.01$). This coefficient means that for each unit increase in advocacy content exposure (measured on a 5-point scale), the economic empowerment composite score (0-20) increases by 0.62 units, holding other factors constant (Table 7).

Table 7

Inferential Statistics Correlations and Regression

Analysis Type	Variables	Coefficient (r or β)	95% CI	p-value
Pearson Correlation	Listenership and Empowerment	0.45	[0.35, 0.54]	< .05
Pearson Correlation	Income and Engagement	0.28	[0.16, 0.39]	< .05
Linear Regression	Advocacy Exposure (Predictor) and Empowerment (DV)	0.62	[0.52, 0.72]	< .01

Note. r represents Pearson correlation coefficient. β represents standardized regression coefficient. CI represents confidence interval.

Challenges to Content Effectiveness

Key informants identified barriers that have hindered Mang’elele FM from reaching its full potential as a community radio promoting economic growth in Makueni County. The barriers identified by key informants include;

- *"Leadership Disputes: Internal wrangles among community groups hinder strategic planning." (Field Data, 2021)*
- *"Regulatory Constraints: 2019 broadcasting regulations prohibit advertising alcohol, cigarettes, and gambling, limiting revenue." (Field Data, 2021)*

- *"Resource Limitations: High electricity costs and blackouts disrupt broadcasting." (Field Data, 2021)*
- *"Competition: Commercial radio stations with broader revenue pose challenges." (Field Data, 2021)*

These constraints limit Mang’elele FM’s ability to sustain high-quality programming and engage experts. When the radio station is involved in leadership wrangles, it makes it difficult to formulate internal policies to ensure strategic planning of programs. The 2019 broadcasting regulations have denied the station much-needed revenue by critically shrinking its advertising revenue. With limited advertisement revenue, the station struggles to cover basic operational costs

such as electricity. The leadership disputes, broadcasting regulations and resource limitations make it hard for Mang’elele FM to compete with commercial radio stations within Makueni County.

Discussion

The findings align with participatory development communication theory, emphasizing audience engagement and feedback (Waisbord, 2001). Mang’elele FM’s Kamba-language, place-specific content fosters ownership, enabling residents to address economic challenges like low agricultural productivity and service access. The 88.5% listenership reflects radio’s accessibility, supporting UNDP (2017) findings on ICT’s role in poverty alleviation. Programmes like Evening Drive, addressing water, health, and poverty, suggest associations with outcomes like borehole drilling and healthcare improvements, embodying dialogue-driven change.

However, low incomes (54.2% at \$46.33-\$69.50) suggest insufficient impact for poverty alleviation, on top-down limitations. Mang’elele FM’s reliance on general presenters (noted by 25.8% of respondents) restricts content depth. Its advocacy for government and NGO interventions, such as wildlife compensation and drought-resistant crops, underscores its role as a community-service provider bridge. Qualitative evidence supports quantitative patterns: Key informants’ reports of advocacy yielding boreholes and SACCOs align with the regression ($\beta=0.62$), illustrating how content exposure associates with empowerment. However, barriers like leadership disputes challenge these associations, as they disrupt content quality, potentially weakening the income-engagement correlation ($r=0.28$) by limiting sustained engagement.

Leadership disputes and regulatory barriers mirror challenges across African community radio (Jallo, 2012). Advertising restrictions limit financial sustainability, relying on inconsistent county funding. Compared to other Kenyan community radios like Musyi FM, Mang’elele FM’s vernacular focus is a strength, but resource constraints hinder scalability. Enhancing expert involvement and community participation could amplify impact, aligning with Myers’ (2011) call for professional content in rural media.

4.0. Conclusion

Mang’elele FM’s programme content suggests a perceived contribution to economic development in Makueni County through educative platforms, financial literacy, and service delivery advocacy. Its Kamba-language broadcasts ensure accessibility, while its focus on local issues resonates with residents. However, gaps in programme quality, limited expert involvement, and operational challenges restrict its potential.

Most challenges can be addressed, such as using solar panels for power backups (clean energy with low maintenance) or a well-thought-out constitution to resolve leadership wrangles. Low revenue generated because of limited advertising space is not debilitating because the station is not for profit. The community has various avenues to participate in the station, through physical live hosts, telephone calls, short messages, and other methods. Continued participation by the community in the running of Mang’elele FM ensures that their voice is heard and that their economic needs can be responded to.

Community radio provides a two-way communication model and a bottom-up information flow. Here, the community members become the source determinants of what is

broadcast, a unique feature absent in the mainstream media.

Future research could explore digital platform integration for enhanced reach and long-term economic impacts of interventions like SACCOs via longitudinal studies, building on this study's findings in rural contexts.

5.0 Recommendations

Based on the findings, it is recommended to strengthen professional expertise, amplify community engagement, and advocate for enabling policy frameworks. Proposing relaxed advertising regulations and reduced licensing fees could facilitate participatory communication. Incorporating agricultural specialists would align with Makueni's primary economic sector, while addressing historical information deficiencies could enhance resident empowerment through informed discourse.

- **Enhance Programme Quality:** Increase economic-themed airtime during peak hours and reduce presenter talk time. This is supported by listener feedback in Table 6 (Field Data, 2021), where 55.8% called for improved quality, 6.2% suggested

reducing talk time, and others recommended longer durations for effectiveness.

- **Increase Expert Involvement:** Engage agricultural and financial experts to enhance content credibility. This stems from 25.8% of respondents suggesting more expert guests (e.g., agricultural officers) to improve quality (Table 6, Field Data, 2021), addressing limited expert involvement.
- **Strengthen Community Participation:** Expand feedback platforms (e.g., live calls, SMS) to align content with priorities. This is supported by majority perceptions of empowerment through engagement (Section 3.0), implying need for expanded participatory mechanisms.
- **Advocate for Policy Reform:** Lobby for relaxed advertising regulations and lower licensing fees. This connects to "Regulatory Constraints" (Section 3.0, Challenges to Content Effectiveness), where 2019 regulations limited revenue, prompting reforms for sustainability.

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