



Political Brand Positioning in an Extractive Conflict Region: A Conjoint Analysis of Banyuwangi Voter Preferences Based on the Dual Sustainability Framework

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ARTICLE INFO

Keywords: Political Brand Positioning, Conjoint Analysis, Dual Sustainability, Extractive Conflict, Voter Preference

Received : 20, June

Revised : 22, July

Accepted: 29, August

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ABSTRACT

Mineral resource-rich regions confront a dual sustainability paradox: electoral pressures pull toward the short term, ecological demands toward the long term. Near the Tumpang Pitu gold mine in Banyuwangi, this paradox shapes how voters judge candidates, examined here through Full-Profile Rating-Based Conjoint Analysis set inside a Dual Sustainability Framework. A sample of 100 registered voters (60 from an impact zone, 40 from a control zone) rated sixteen ORTHOPLAN-generated profiles on a 1–9 scale. Fit statistics held up throughout (Pearson $R=0.971$; Kendall's $\tau_b=0.862$). Of the five attributes, Future Generation Vision is the most decisive, while the extractive-intensive strategy is the most rejected. Zone comparisons diverged: control-zone voters leaned ecologically radical, impact-zone voters stayed pragmatic, arguing against uniform positioning strategy.

INTRODUCTION

Indonesia's mineral-rich regions are at the center of a stark political marketing paradox. On the one hand, growing environmental awareness is driving candidates to build a credible and ecologically oriented image (Nygren et al., 2022; Setyawati, 2021). On the other hand, voters in these regions remain heavily economically dependent on the extractive sector, leading their expectations to be focused on quick wins such as direct social assistance, physical infrastructure development, and job creation in the mining sector (Malin et al., 2019; Varkkey et al., 2018). This situation forces political branding strategies to operate in two opposing directions simultaneously: meeting the demands of short-term electoral support while demonstrating a commitment to long-term ecological sustainability.

Banyuwangi Regency is a very relevant case study, because of its position right in the middle of the dual economic transformation process that is characteristic of the region. The expansion of the extractive sector through the Tumpang Pitu gold mine, operating since 2017 with a production of approximately 250,000 ounces of gold per year, has triggered escalating land conflict and local community resistance (Lestariningsih & Santoso, 2016; Timur, 2023). At the same time, an economic transformation based on sustainable tourism has increased tourist visits from 3.2 million in 2016 to 6.8 million in 2019 and created around 45,000 jobs in the tourism sector (Carter, 2013; Chu et al., 2017). This dual trajectory creates ideal conditions for examining voter preferences toward candidates with different brand positioning: candidates who promise extractive intensification for rapid economic growth versus candidates who offer green economic diversification for long-term sustainability.

The political marketing literature to date remains limited in understanding how voters perform an intertemporal trade-off, that is, exchanging short-term interests in the form of immediate gratification from populist programs for long-term interests in the form of sustainability from green economic transformation. Studies of political branding generally focus on a single dimension such as competence or integrity, without systematically exploring how voters evaluate combinations of attributes carrying different time horizons (Bansak et al., 2022; Hainmueller et al., 2014). Meanwhile, the resource curse and extractive politics literature extensively examines economic impacts and distributional conflict but rarely translates these findings into an analysis of political brand positioning strategy (Menton et al., 2020; Schlosberg, 2004).

This gap places the present study at the intersection of three literatures that have not been systematically integrated: political marketing, resource curse, and intertemporal choice. Political marketing studies using conjoint analysis remain dominated by developed-country contexts and thus rarely explore the dynamics of extractive regions in developing countries (Abramson et al., 2022; Arnesen et al., 2019). The resource curse literature more often identifies macro-structural impacts but offers little micro-level analysis of how voters trade off against different candidate profiles (Chagadama & Viljoen, 2024; Nygren et al., 2022). The application of intertemporal choice theory to dissect political behavior in resource-rich regions likewise remains very limited (Puleo et al., 2024). The

novelty of this study lies in developing a Dual Sustainability Framework (DSF) that synergizes these three theoretical domains to dissect the tension between short-term electoral sustainability and long-term ecological sustainability, and in using full-profile rating-based conjoint analysis to measure the relative contribution of each program attribute to voter preferences.

Departing from this gap, this study aims to deconstruct the structure of voter preferences in an extractive conflict region by identifying the DSF-based political brand attributes most determinant for candidate electability, explaining the trade-off patterns voters make between the electoral sustainability and ecological sustainability dimensions, and testing the extent to which these preferences vary according to the intensity of mining conflict exposure experienced by voters. By treating Banyuwangi as a critical case, this research offers empirical evidence on the capacity of voters in extractive regions to escape the populism trap toward a more sustainable political transition, while providing evidence-based guidance for candidates to build a sustainable political brand that avoids greenwashing (Cislak et al., 2021; Nemes et al., 2022; Williams, 2024).

LITERATURE REVIEW

Political Brand Positioning and the Two Dimensions of Sustainability

Political brand positioning refers to a candidate's effort to place themselves within voters' perceptual space through a combination of attributes distinguishable from competitors. Unlike commercial branding oriented toward product differentiation, a political brand is evaluated by voters as a policy promise carrying distributive and temporal consequences. (Carter, 2013) examined the shift in environmental issues, from being on the fringes of inter-party competition to becoming a central issue. Thus, candidates' ecological stances have become a truly valuable brand asset, no longer merely a secondary issue. However, the value of these assets varies across regions. In areas where the economy still relies on extractive industries, promises of a green transition can potentially be perceived as a threat to people's livelihoods (Malin et al., 2019; Varkkey et al., 2018).

This tension forms the basis of this research in developing what is called the Dual Sustainability Framework (DSF). This framework does not view political branding in extractive areas as a single-dimensional phenomenon, but rather, it is based on two dimensions of sustainability that operate simultaneously, but not always in the same direction. The first dimension, electoral sustainability, encompasses factors that maintain political support in the short term, namely the orientation of development programs and the model of political support sustainability. The second dimension, ecological sustainability, encompasses factors that maintain environmental integrity in the long term, namely post-mining commitments and a vision for future generations. Between these two dimensions, local economic strategies act as a connecting attribute, simultaneously shaping both short-term income and long-term ecological footprints (Nygren et al., 2022; Puleo et al., 2024).

One strand of the resource curse literature expects the reverse: in extraction-dependent regions, short-term attributes should dominate the preference structure simply because their payoff is concrete and immediate (Malin et al., 2019; Varkkey et al., 2018). By contrast, the environmental justice literature argues that the experience of conflict actually erodes the legitimacy of the extractive industry and drives demands for intergenerational justice (Menton et al., 2020; Schlosberg, 2004). Comparing importance scores across the DSF dimensions gives a direct way to test which of these predictions actually holds up.

H1: In an extractive conflict region, attributes belonging to the ecological sustainability dimension carry higher importance scores than those belonging to the electoral sustainability dimension in shaping voter preferences.

Intertemporal Choice and the Electoral–Ecological Trade-Off

People routinely discount future benefits against present ones, a tendency intertemporal choice theory captures by explaining how people weigh rewards received at different points in time. In the electoral context, this theory predicts that voters will assign higher utility to quick-wins programs than to long-term investment. (Puleo et al., 2024) show that environmental issue preferences are latent and are activated only when transition costs are perceived as manageable. The implication is that voters do not choose dichotomously between short and long horizons, but rather seek a compromise point that allows both to be satisfied simultaneously.

Conjoint analysis is a fitting instrument to capture such calculation because it forces respondents to evaluate whole profiles containing explicit trade-offs among attributes, rather than stating preferences separately on each issue (Bansak et al., 2022; Hainmueller et al., 2014). Accordingly, a pattern of choosing moderate levels across attributes can be read as evidence of intertemporal calculation, not merely a tendency to answer in the middle.

H2: Voters assign the highest *part-worth utility* to attribute levels that are *moderate* or balanced compared with extreme levels, whether short-term extremes or long-term extremes.

Environmental Justice, Conflict Exposure, and Preference Heterogeneity

The environmental justice perspective places direct experience of injustice in resource distribution as a shaper of political attitudes. (Schlosberg, 2004) formulates environmental justice as a configuration of distribution, recognition, and participation, while (Anguelovski, 2016) shows that communities that have experienced toxic exposure develop heightened vigilance toward rehabilitation promises unaccompanied by accountability mechanisms. (Celermajer et al., 2020) extend the scope of such justice to future generations and species, while (Chu et al., 2017) underscore the importance of inclusivity in adaptation agendas.

In the Banyuwangi context, the experience of land conflict around Tumpang Pitu is expected to moderate how voters evaluate political brand attributes (Lestariningsih & Santoso, 2016; Timur, 2023). Yet the direction of this moderation is theoretically ambiguous. Voters in the impact zone may become more demanding because they directly experience the mine's externalities, or conversely more pragmatic because their livelihoods are tied to the mine's

operation (Cotton, 2017; Kügerl et al., 2022). It is this ambiguity that makes the comparison of impact and control zones a meaningful empirical test.

H3: There is preference-structure heterogeneity between voters in the impact zone and the control zone, such that the intensity of extractive conflict exposure moderates' voters' sensitivity to political brand attributes.

The synthesis of these three hypotheses is set out in the conceptual framework in Figure 1. The framework positions five program attributes as the operationalization of the two DSF dimensions, voter preference as the construct estimated through *part-worth utility*, and the conflict exposure zone as the moderating variable.

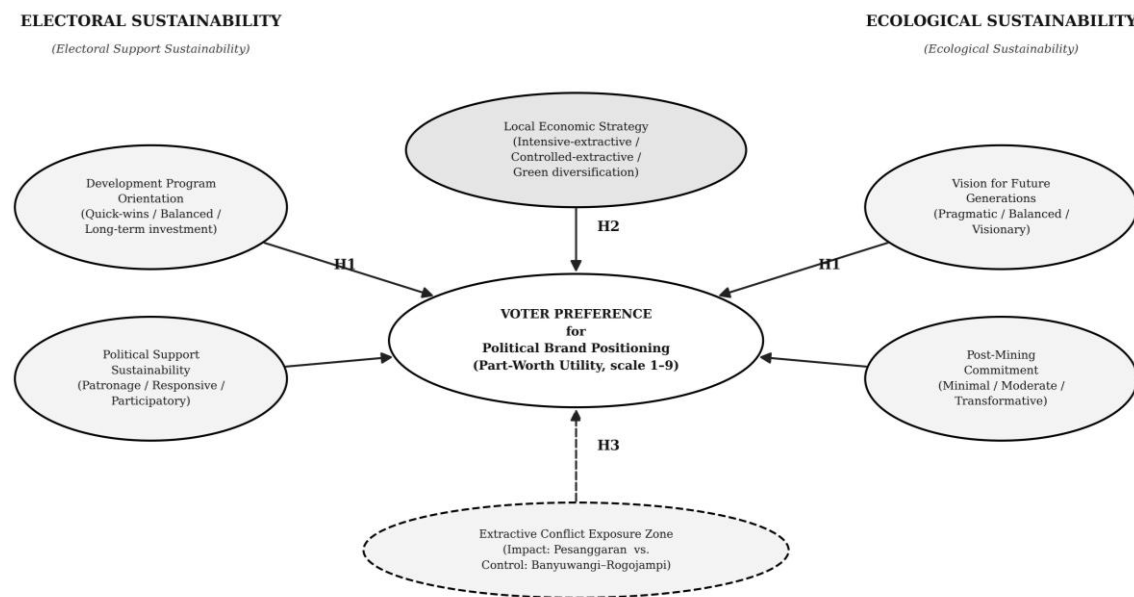


Figure 1. Conceptual Framework of the *Dual Sustainability Framework*

METHODOLOGY

This study is quantitative research with a *cross-sectional* design that uses *Full-Profile Rating-Based Conjoint Analysis* to measure voter preferences toward *political brand* attributes in Banyuwangi Regency. This method was chosen for its ability to estimate *part-worth utilities* and *importance scores* with precision while minimizing *social desirability bias*, because respondents' rate whole profiles and are not asked to state attitudes toward sensitive issues directly (Arnesen et al., 2019; Bansak et al., 2022; Hainmueller et al., 2014; Leeper et al., 2020).

The conjoint experimental design was built through the ORTHOPLAN procedure in SPSS Statistics 27, which reduced 243 full combinations (3^5) to 16 development program profiles coded S1-S16 covering five attributes with three levels each. This reduction through a fractional factorial design ensures that the design remains orthogonal and balanced at all levels, allowing the main effect of each attribute to be estimated without confounding with the effects of other attributes. Each respondent rated sixteen profiles on a scale of 1–9, resulting in a total of 1,600 observations with statistical power above 0.80. The attributes and levels used are presented in Table 1.

Table 1. Program & Policy Attributes and Levels

Attribute	Level	Operational Definition	DSF Dimension
Development Program Orientation	<i>Quick-wins</i>	Short-term programs: direct social assistance, physical infrastructure, economic stimulus	<i>Electoral</i>
	<i>Balanced</i>	Combination of short-term programs and medium-term investment (health, productive economy)	
	<i>Long-term investment</i>	Long-term programs: education, green tourism, sustainable economy	
Local Economic Strategy	Intensive-extractive	Expansion of the mining sector for rapid economic growth	<i>Electoral–Ecological</i>
	Controlled-extractive	Mining under strict regulation and environmental-impact monitoring	
	Green diversification	Transition to a green economy: tourism, organic agriculture, renewable energy	
Political Support Sustainability	Patronage	Transactional politics: material assistance, personal connections, patron-client relations	<i>Electoral</i>
	Responsive	Provision of public services that proactively respond to citizens' needs	
	Participatory	Citizen empowerment, collaborative decision-making, community capacity building	
Post-Mining Commitment	Minimal	Standard reclamation per minimum regulation without follow-up programs	<i>Ecological</i>
	Moderate	Ecosystem restoration with land rehabilitation and reforestation programs	
	Transformative	Comprehensive rehabilitation, generational compensation, and community economic transition programs	
Vision for Future Generations	Pragmatic	Focus on the welfare of the present generation and immediate economic benefits	<i>Ecological</i>
	Balanced	Balance between the needs of the present generation and future generations	
	Visionary	Long-term human capital investment and ecological preservation for future generations	

Source: Developed by the authors (2026)

The study population comprises registered voters in Banyuwangi Regency. The sample size of n=100 meets the 30–50 respondents-per-group threshold required for stable estimation of *part-worth utilities* in a *full-profile* design (Akaah

et al., 1988; B. K. Orme et al., 2010). Sample allocation was set at 60% impact zone (n=60) and 40% control zone (n=40) through three-stage *multistage purposive-quota sampling*. The first stage selected districts: Pesanggaran as the impact zone because it lies less than 20 km from the Tumpang Pitu gold mine and has a history of mining conflict, and Banyuwangi city and Rogojampi as the control zone because they lie more than 40 km from the mine site with a non-extractive economic base (Cotton, 2017; Lestariningsih & Santoso, 2016). The second stage selected four villages or urban wards per district based on proximity to conflict points to maximize experiential variation (Malin et al., 2019). The third stage set respondent quotas: gender 50:50 (Chagadama & Viljoen, 2024) and an age distribution of 35% (17–35 years), 40% (36–55 years), and 25% (over 55 years) based on 2024 Bawaslu voter data.

Instrument pilot testing (*pilot test*, n=30) showed good model fit with a Pearson R of 0.971 and a Kendall's tau-b of 0.785, a 100% *completion rate*, and an average completion time of 18.6 minutes. All *Go/No-Go* indicators exceeded the minimum threshold of 0.70, so the instrument was deemed suitable for main data collection (Bansak et al., 2022; Hainmueller et al., 2014). Data collection was carried out face-to-face by four trained enumerators using an instrument sheet that included *informed consent*, respondent identity, completion instructions, and 16 development program profiles.

Data analysis was conducted using SPSS Statistics 27 in five stages. First, *data cleaning* covering checks for *missing data*, *outliers*, and response consistency. Second, verification of model fit through the Pearson R and Kendall's tau-b coefficients with a minimum target of 0.70. Third, estimation of *part-worth utilities* through the CONJOINT procedure. Fourth, computation of each attribute's *importance score* using Equation (1). Fifth, subgroup analysis through the *split-file* procedure by region zone following the guidance of Leeper et al. (2020).

$$\text{Importance}(j) = \text{Range}(j) / \Sigma \text{Range} \times 100\% \quad \dots\dots\dots (1)$$

RESEARCH RESULT

Respondent Profile

A total of 111 questionnaires were received during the data collection period. Eleven respondents were eliminated because they were identified as *flat responders*, that is, respondents who gave identical ratings across all 16 profiles so that the standard deviation of their scores was zero and contained no discriminative information required for estimating *part-worth utilities*. The final dataset analyzed comprised 100 respondents with the distribution presented in Table 2. All stratification quotas were met as designed, so that zone-based subgroup analysis can be conducted with adequate representativeness following the guidance of (Leeper et al., 2020).

Table 2. Respondent Demographic Profile (n=100)

Variable	Category	n	%
Region Zone	Impact Pesanggaran District (Tumpang Pitu)	60	60.0
	Control - Banyuwangi City & Rogojampi	40	40.0

Variable	Category	n	%
Gender	Male	50	50.0
	Female	50	50.0
Age Group	17–35 years	35	35.0
	36–55 years	40	40.0
	Over 55 years	25	25.0

Source: Primary data processed (2026)

Model Goodness-of-Fit

Before substantive interpretation, the conjoint model's fit was verified using the Pearson R and Kendall's tau-b coefficients as indicators of the correspondence between observed and estimated preferences (Bansak et al., 2022; Hainmueller et al., 2014). Verification was conducted at three levels: the overall sample and two zone subgroups via the *split-file* procedure. The results are presented in Table 3.

Table 3. Model Fit Results - Overall and Zone Subgroups

Subgroup	n	Pearson R	Kendall's tau-b	Sig.
Overall (S1–S16)	100	0.971	0.862	< 0.001
Impact Zone (Pesanggaran)	60	0.958	0.857	< 0.001
Control Zone (Banyuwangi/Rogojampi)	40	0.961	0.840	< 0.001

Source: SPSS Statistics 27 output, CONJOINT procedure, processed (2026)

All three submodels exceeded the minimum threshold of 0.70 and no *reversals* were found, so all estimates of *part-worth utilities* and *importance scores* can be interpreted with high confidence. The consistency of the values with the *pilot test* results confirms the stability of the ORTHOPLAN instrument used.

Attribute Importance Scores

Each attribute's *importance score* was computed using Equation (1) and is presented at three analysis levels in Table 4. The results show that Vision for Future Generations is the most determinant attribute at the overall level, while Development Program Orientation occupies the lowest position.

Table 4. Attribute Importance Scores - Overall and by Zone

Program Attribute	DSF Dimension	Overall (n=100)	Impact (n=60)	Control (n=40)	$\Delta I-C$
Vision for Future Generations	Ecological	21.253	21.505	20.874	+0.63
Local Economic Strategy	Electoral-Ecological	20.900	19.876	22.437	-2.56
Political Support Sustainability	Electoral	20.505	21.335	19.261	+2.07

Program Attribute	DSF Dimension	Overall (n=100)	Impact (n=60)	Control (n=40)	Δ I-C
Post-Mining Commitment	<i>Ecological</i>	20.037	19.352	21.066	-1.71
Development Program Orientation	<i>Electoral</i>	17.304	17.932	16.362	+1.57

Source: SPSS CONJOINT output, processed (2026). Values in percent. DSF = Dual Sustainability Framework; Δ I-C = Impact Zone minus Control Zone.

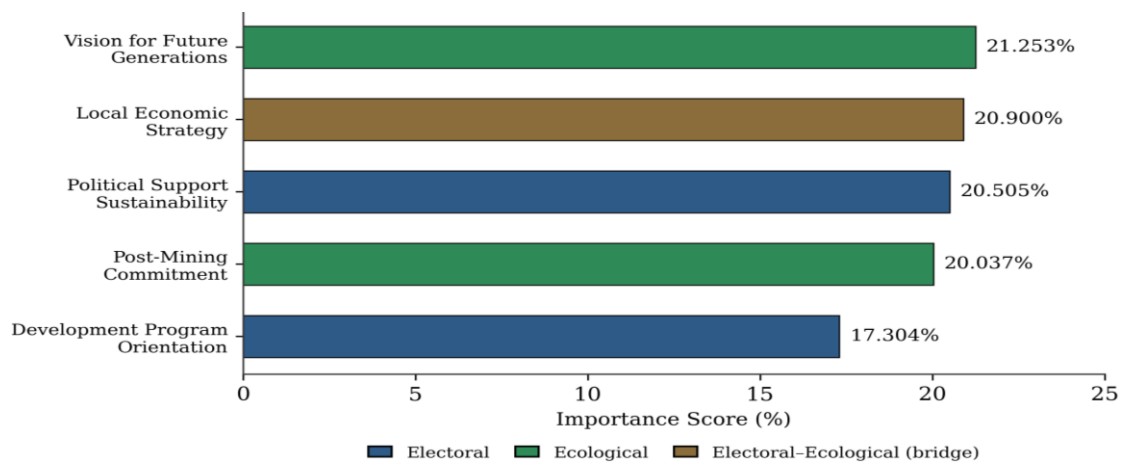


Figure 2. Attribute *Importance Scores*, Ordered and Colored by DSF Dimension

When added together, the two ecological attributes, namely Future Generation Vision and Post-Mining Commitment, contribute 41.290% of the total weight, while the two electoral attributes, namely Sustainability of Political Support and Development Program Orientation, contribute 37.809%. The bridging attribute Local Economic Strategy contributes 20.900%. The relatively narrow range of *importance scores*, from 17.304% to 21.253%, indicates that the five attributes provide evenly distributed informational contributions.

Part-Worth Utility Estimates

The *part-worth utility* estimates for all 15 attribute levels are presented in Table 5, together with cross-zone comparisons and heterogeneity markers. Positive values indicate preference for the level relative to its attribute mean, while negative values indicate rejection.

Table 5. Attribute *Part-Worth Utilities* - Overall and by Zone

Attribute and Level	Overall	Impact (n=60)	Control (n=40)	Δ I-C	Heterogeneity
Development Program Orientation					
Quick-wins (fast results, 1-2 years)	-0.052	-0.060	-0.042	-0.018	Low

Attribute and Level	Overall	Impact (n=60)	Control (n=40)	Δ I-C	Heterogeneity
Balanced ✓ (mix of short- and long-term)	+0.098	+0.105	+0.086	+0.019	Low
<i>Long-term investment</i> (5–10-year investment)	–0.045	–0.045	–0.045	0.000	None
Local Economic Strategy					
Intensive-extractive (expand Tumpang Pitu mine)	–0.429	–0.365	–0.525	+0.160	Medium
Controlled-extractive (strict oversight + compensation)	+0.168	+0.203	+0.116	+0.087	Low
Green diversification ✓ (Ijen Crater, organic farming, solar energy)	+0.261	+0.162	+0.409	–0.247	High
Political Support Sustainability					
Patronage (direct assistance and personal closeness)	–0.072	–0.082	–0.058	–0.024	Low
Responsive (responsive to complaints, fast follow-up)	–0.155	–0.034	–0.336	+0.302	High
Participatory ✓ (village deliberation, citizens set priorities)	+0.227	+0.116	+0.395	–0.279	High
Post-Mining Commitment					
Minimal (standard closure, no follow-up program)	–0.216	–0.143	–0.325	+0.182	Medium
Moderate (restore land and replant)	+0.054	+0.126	–0.053	+0.179	High
Transformative ✓ (rehabilitation + training + compensation)	+0.162	+0.017	+0.378	–0.361	High
Vision for Future Generations					
Pragmatic (focus on the present; the future is the next leader's affair)	–0.394	–0.338	–0.479	+0.141	Medium
Balanced ✓ (meet present needs without harming the children's legacy)	+0.235	+0.302	+0.133	+0.169	Medium
Visionary (defer present benefits; scholarships, protected forest, green economy)	+0.160	+0.035	+0.346	–0.311	High
(Constant)	6.143	6.035	6.304	–	–

Source: SPSS CONJOINT output, processed (2026). The ✓ mark indicates the highest-utility level within its attribute. Heterogeneity is classified as High when $|\Delta I-C| > 0.25$; Medium when $0.10 \leq |\Delta I-C| \leq 0.25$; Low when $|\Delta I-C| < 0.10$.

At the overall level, the highest-utility level within each attribute is, respectively, *Balanced*, Green diversification, Participatory, Transformative, and Balanced (vision). The strongest rejection in absolute terms occurs at the Intensive-extractive level, followed by the Pragmatic level. Six of the fifteen levels are classified as highly heterogeneous across zones, all concentrated in the ecological attributes and the bridging attribute. A visual comparison of these six levels is presented in Figure 3.

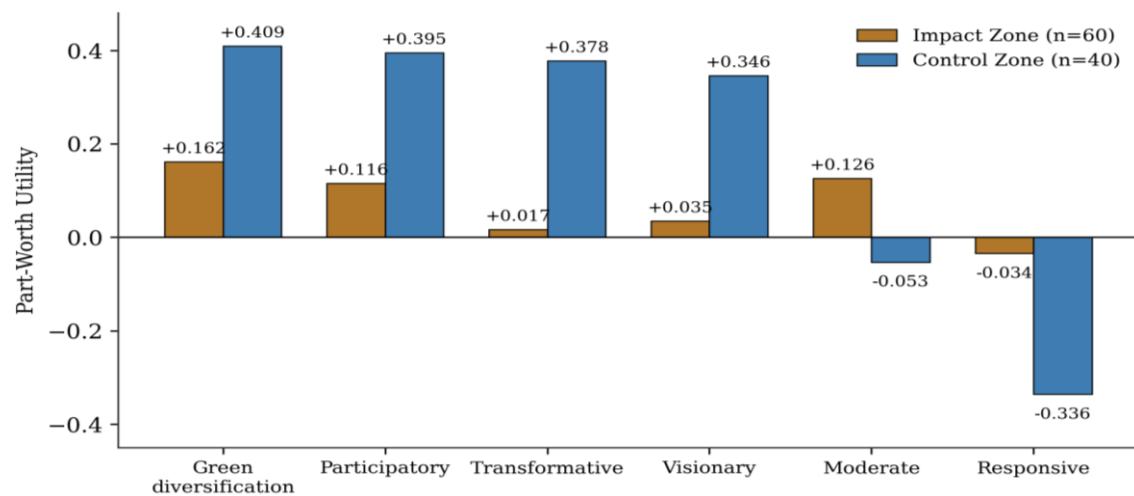


Figure 3. Comparison of *Part-Worth Utility*, Impact Zone vs. Control Zone, across the Six Highly Heterogeneous Levels

Ideal Program Profile by Zone

Combining the highest-utility level within each attribute for each zone yields different ideal program profiles, as presented in Table 6. Convergence across zones occurs on only two of the five attributes.

Table 6. Ideal Program Profile Based on the Highest Utility by Zone

Attribute	Impact Zone (n=60)	Utility	Control Zone (n=40)	Utility	Convergence
Program Orientation	<i>Balanced</i>	+0.105	<i>Balanced</i>	+0.086	Convergent
Economic Strategy	Controlled-extractive	+0.203	Green diversification	+0.409	Divergent
Political Support	Participatory	+0.116	Participatory	+0.395	Convergent
Post-Mining Commitment	Moderate	+0.126	Transformative	+0.378	Divergent
Generational Vision	Balanced	+0.302	Visionary	+0.346	Divergent

Source: Processed from SPSS CONJOINT output (2026).

DISCUSSION

Rejecting the Resource Curse Trap and the Dominance of the Ecological Dimension

The most striking finding of this study is the refutation of the dominant assumption in the *resource curse political marketing* literature that voters in extractive regions tend to prioritize short-term economic incentives (Malin et al., 2019; Varkkey et al., 2018). As shown in Table 4, the Vision for Future Generations attribute is in fact the most determinant, surpassing the short-horizon Development Program Orientation. The accumulated weight of the two ecological attributes exceeds the accumulated weight of the electoral attributes, so H1 receives empirical support, although this advantage is gradual rather than an absolute dominance.

Reinforcement of this finding comes from the rejection pattern in Table 5. The Extractive-intensive level, marked by the expansion of the Tumpang Pitu gold mine to accelerate job creation and regional revenue, recorded the largest negative utility in absolute terms among all levels tested. This pattern suggests the formation of a kind of anti-extractive threshold in the minds of Banyuwangi voters, consistent with (Menton et al., 2020) and (Nygren et al., 2022) on the eroding legitimacy of extractive industries in post-conflict communities. Practically speaking, this finding points to a fairly clear conclusion: pro-mining narratives centered on job creation can no longer be relied upon as an electoral asset, even in regions whose economies remain dependent on mining activity itself.

Intertemporal Trade-Off and Preference for Moderate Levels

A consistent pattern is seen across all attributes, namely a tendency for voters to choose the middle option over the extreme options. For the Program Orientation attribute, the Balanced option proved superior to both the Quick-Wins and Long-Term Investment options. A similar pattern is also seen for the Generation Vision attribute, where the Balanced option outperformed the Visionary option. It is noteworthy that both extreme options for the Program Orientation attribute yielded negative scores, indicating that voter rejection is not only focused on short-term populism, but also on long-term asceticism that delays the acquisition of benefits. This finding supports H2, pointing to a fairly sophisticated intertemporal calculation on voters' part: they recognize today's economic needs, yet refuse to fully sacrifice the ecological future (Puleo et al., 2024).

When viewed through the DSF framework, these findings suggest that voters actually consider both dimensions of sustainability simultaneously, rather than favoring one dimension at the expense of the other. Conventional attitude surveys, which typically ask about each issue separately, likely fail to capture such patterns. This trade-off only becomes observable because the study design requires respondents to evaluate complete profiles, with the trade-off already embedded directly within them (Bansak et al., 2022; Hainmueller et al., 2014).

A significant exception was found in the Sustainability of Political Support attribute, where Participatory performance convincingly outperformed both Patronage and Responsiveness, while Responsiveness received a negative score.

These results suggest that candidate responsiveness alone, without citizen involvement in decision-making, is deemed insufficient. This aspiration for a village deliberation mechanism to determine development priorities aligns with the arguments of (Cislak et al., 2021) and (Schlosberg, 2004) regarding the weakening trust in patronage approaches, as well as the importance of the participatory dimension for environmental justice in regions that have experienced inequities in the distribution of natural resources.

The Economic Dependence Paradox: Preference Heterogeneity Across Zones

Subgroup analysis reveals the theoretically most intriguing pattern of this study. The Control Zone, which has no direct economic dependence on the mine, in fact exhibits more extreme ecological preferences than the Impact Zone. Table 5 shows that the largest gaps between zones occur at the Transformative, Visionary, Participatory and Green Diversification levels, where all four tend to be preferred by the Control Zone. On the other hand, the Impact Zone still shows a positive value at the Moderate Commitment level, even though this level is completely rejected by the Control Zone, and the Impact Zone also prefers the Balanced Vision to the Visionary.

This finding supports H3, though the direction of the effect runs counter to initial expectations. Proximity to conflict does not appear to trigger ecological radicalism; instead, it produces transitional pragmatism. Pesanggaran voters fundamentally still want a green transition, but not at the expense of the livelihoods they currently depend on, leading them to favor options that are realistic to implement during the transition rather than options that are abstractly ideal. The Extractive-controlled level further reinforces this reading. As a middle-ground option offering mining under strict oversight paired with compensation, this level scored higher in the Impact Zone than in the Control Zone, making it the only level on the Economic Strategy attribute actually preferred by the directly affected zone.

These findings provide a significant nuance to the environmental justice literature. (Anguelovski, 2016) and (Chagadama & Viljoen, 2024) argue that affected communities tend to develop strong demands for distributive justice, and this finding is confirmed in this study. However, these demands are calibrated to the livelihood risks they face, not absolute. In other words, economic dependence does not eliminate ecological aspirations, but merely shortens their time horizon. The Impact Zone requires commitments that can operate over the medium term, while the Control Zone, which does not bear direct transition costs, has greater room to support a truly transformative agenda (Cotton, 2017; Kügerl et al., 2022).

A Context-Sensitive Political Brand Positioning Blueprint

By combining importance scores, part-worth utility, and the results of subgroup analysis, a differential positioning strategy can be formulated, as summarized in Table 6. For the Impact Zone, the most realistic step is to undertake a gradual transition, namely using controlled mining as a bridge, moderate rehabilitation as an initial concrete step, and a balanced vision that still accommodates current economic needs. Campaign messages in the region need to frame compensation and post-mining rehabilitation as commitments that can

be truly verified by residents, not merely normative promises that are vague and uncertain.

The Control Zone allows for much bolder stances, such as full green diversification, transformative post-mining commitments, and a truly visionary outlook. The zone's strong preference for this third level suggests that electoral competition in the region is based more on substance than transaction (Arnesen et al., 2019; Carter, 2013). Only two elements are consistently accepted across both zones: A Balanced program orientation and a Participatory approach, which constitutes almost the only common ground for formulating a single campaign message.

It should be emphasized that this differential approach is not a form of greenwashing. What truly differs between zones is the level of ambition and how priorities are structured to reflect differing livelihood realities, not whether ecological claims are backed by concrete actions. (Cislak et al., 2021) and (Nemes et al., 2022) show that claims without concrete follow-up erode public trust over time, and this study directly confirms this. Voters in both zones unanimously rejected the Minimal level of post-mining commitment, a level that essentially represents formal compliance without meaningful substance (Williams, 2024).

Validation of the Dual Sustainability Framework and Instrument Implications

Theoretically, this study provides preliminary empirical validation of the DSF as a conceptual framework. The consistent *part-worth utility* estimates across all attributes confirm that the *electoral sustainability* and *ecological sustainability* dimensions are two constructs that can be measured and distinguished empirically in the context of voter preferences (Nygren et al., 2022; Schlosberg, 2004). The relatively even distribution of *importance scores* across the five attributes indicates that the *Dual Sustainability Scale* developed in this study has adequate discriminant power, in the sense that each attribute contributes unique information not reducible to the others.

This contribution complements the conjoint-based *political marketing* literature that has been dominated by developed-country contexts with demographic candidate attributes (Abramson et al., 2022; Leeper et al., 2020). By placing environmental-policy substance as the core attribute and conflict exposure as the moderating variable, this study extends the reach of the conjoint method into extractive politics in developing countries. These findings become the empirical basis for filing intellectual-property rights over the *Dual Sustainability Scale* instrument and for compiling a *policy brief* as guidance on *political brand positioning* strategy for stakeholders in Banyuwangi Regency.

CONCLUSIONS AND RECOMMENDATIONS

This study deconstructs the structure of voter preferences in the extractive conflict region of Banyuwangi using *Full-Profile Rating-Based Conjoint Analysis* grounded in the *Dual Sustainability Framework*. All three hypotheses received empirical support. First, the ecological attributes led by Vision for Future Generations proved more determinant than the electoral attributes, with high model fit across all submodels. Second, voters perform a balanced intertemporal *trade-off* by consistently choosing moderate levels, thereby refuting the dichotomy between short-term populism and long-term asceticism. Third, there

is meaningful preference heterogeneity across zones, in which the Control Zone shows more radical ecological preferences while the Impact Zone is more pragmatic proving that direct economic dependence moderates voters' sensitivity to political brand attributes.

Beyond these three hypotheses, this study identifies a saturation point of pragmatic incentives: The Intensive-extractive and Pragmatic levels have the most negative utilities even in the Impact Zone. This finding indicates that a pro-mining narrative is no longer electorally effective in this region, a conclusion with direct implications for campaign design in resource-rich areas.

For candidates and campaign teams, the main recommendation is to apply a zone-based differential messaging strategy: emphasizing a gradual transition with concrete post-mining commitment in the Impact Zone, and taking a more ambitious green-transition position in the Control Zone, with a *Balanced* orientation and participatory approach as a shared foundation. For the General Election Commission and Election Supervisory Body of Banyuwangi Regency, the *Dual Sustainability Scale* instrument can be used as a public assessment tool for candidate commitments to encourage substance-based program debate. For the regional government, the preference distribution documented in this study can serve as the basis for a *policy brief* in designing a post-mining economic transition scheme that gains citizen legitimacy.

ADVANCED RESEARCH

This study has several limitations that open room for further research. First, the *cross-sectional* design limits causal inference between the intensity of mining-conflict exposure and voter preferences; the cross-zone differences found may also reflect unobserved socio-economic composition differences. Second, the geographic scope limited to a single regency constrains the generalization of findings to other extractive regions with different conflict configurations. Third, this study focused the model on program and policy attributes and thus does not capture the interaction between policy substance and candidates' personal characteristics, which in electoral practice are often evaluated simultaneously by voters. Fourth, the subgroup analysis in this study is limited to the zone dimension, whereas the gender and age dimensions have not been tested separately.

Based on these limitations, further research is suggested to pursue four directions. Replication in the Tapal Kuda region such as Jember and Lumajang is needed to test the regional consistency of the DSF, followed by national generalization in extractive regions outside Java using a *framing message* experiment. A longitudinal design should be applied to capture the temporal dynamics of preferences, particularly before and after the electoral cycle. Moderation analysis based on gender and age can be run through an additional *split-file* procedure following the guidance of (Leeper et al., 2020). Finally, developing a *machine learning*-based electability prediction model can integrate policy attributes with the probability of winning, as a bridge toward downstreaming in the form of a *Political Brand Positioning Toolkit* for stakeholders.

ACKNOWLEDGMENT

The authors express their deepest gratitude to the Faculty of Economics and Business, Universitas Negeri Malang, for the funding of this research through the Beginner Research (Penelitian Pemula) scheme. The highest appreciation is conveyed to the government and community of Pesanggaran District, Banyuwangi City, and Rogojampi for facilitating field access, and to all 100 registered voters who participated voluntarily in this study.

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