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Analysis of Tobacco Downstreaming in Lampung Province as an Effort to Increase the Economy and Regional Income

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Abstract

This study aims to comprehensively analyze the potential of tobacco industry downstreaming and evaluate its impact on economic improvement and regional income in Lampung Province. The method used is Multiple Stakeholder Analysis (MSA) through the MACTOR approach, specifically involving 7 main stakeholder actors and 5 strategic policy objectives. Mapping results indicate that the downstreaming ecosystem is currently controlled by the Industry actor (competitiveness score of 2.1), which is fundamentally supported by the role of Tobacco Farmers (1.9). The initial research hypothesis is confirmed: downstreaming has significant potential to increase regional income through the optimization of the Tobacco Product Excise Revenue Sharing Fund (DBH CHT). This is evidenced by the majority consensus of the actors on the objectives of Regional Economic Development and Illegal Cigarette Control. However, this governance still holds a structural paradox. Despite the formation of solid operational alliances (Industry-Farmers and Bappeda-Perindag), extreme divergence of interests occurs due to raw material price conflicts and bureaucratic orientation friction. Anomalously, NGO and Health institutions actually share a close position with the government on macro issues. In conclusion, the success of downstreaming heavily relies on the local government's capacity to mediate trade conflicts through partnerships (contract farming), reintegrate the role of the Plantation Office, and inclusively allocate DBH CHT for post harvest technology and public health mitigation.

Keywords: Tobacco Downstreaming, Regional Income, MACTOR, Economic Policy, Lampung.

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INTRODUCTION

The Tobacco Product Industry (IHT) is a strategic sector in Indonesia's economic structure with extensive linkages from upstream to downstream. Nationally, this sector not only serves as a massive absorber of labor ranging from tobacco farmers and rolling workers to distribution networks but also acts as the backbone of state revenue through the Tobacco Product Excise (CHT). Amidst various global regulatory pressures regarding cigarette consumption control, this industry continues to demonstrate strong resilience, contributing significantly to the economy and fiscal stability through revenue-sharing funds returned to the regions.

However, at the regional level, specifically in Lampung Province, the tobacco industry faces a complex paradox. Based on statistical data in recent years, there is a disconnection between the consumption side and the production side. On one hand, the cigarette consumption rate in Lampung Province is recorded as the highest in Indonesia and continues to show an upward trend. This is empirically evidenced by the data on Monthly Per Capita Expenditure for Cigarettes and Tobacco for the 2018–2023 period released by the official statistical institution (BPS Lampung Province, 2024) (see Figure 1).

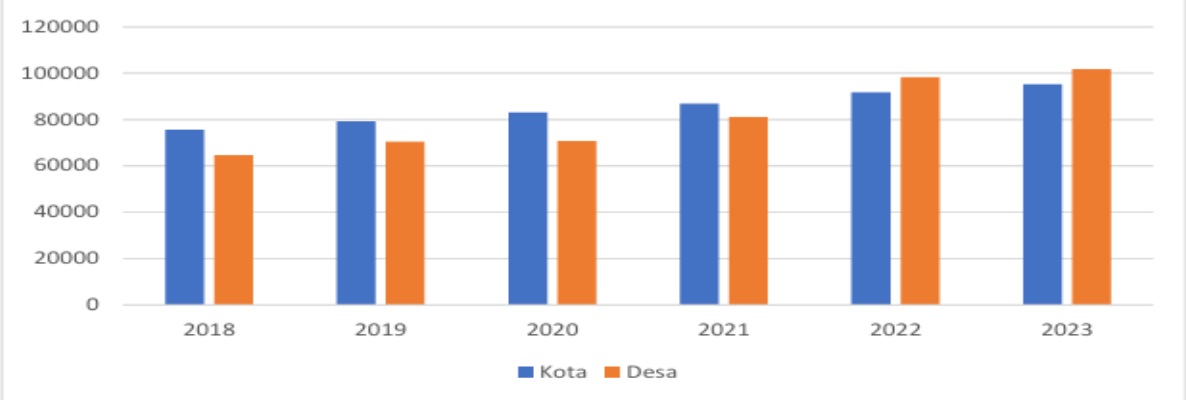


Figure 1: Monthly Per Capita Expenditure for Cigarettes and Tobacco by Region Type in Lampung Province (2018–2023)
Source: BPS-Statistics of Lampung Province (2024)

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Referring to Figure 1, it is evident that the trend of cigarette consumption expenditure continues to rise annually. The data indicates a disparity in expenditure between rural and urban areas. Since 2022, rural communities in Lampung have consistently recorded a significantly higher nominal monthly per capita expenditure on cigarettes compared to urban communities. In the 2022–2023 period, the monthly per capita expenditure in rural areas surged significantly, outpacing the urban figures. This indicates that cigarettes have become an essential and highly inelastic component of household expenditure, particularly among agrarian or rural communities. This high consumption rate reflects the massive market share and financial circulation of tobacco products in Lampung Province.

This high consumption rate is inversely proportional to the upstream sector or tobacco farming situation in Lampung Province. The area of tobacco farming land and the production volume of local tobacco leaves are actually experiencing a concerning downward trend. Disincentives at the farmer level triggered by price fluctuations, climate uncertainty, and a lack of access to processing industries have caused many farmers to switch to other commodities. Consequently, the supply needs of the cigarette industry in Lampung are increasingly difficult to meet with local raw materials. This production decline also directly impacts the reduction of labor absorption in the tobacco agricultural sector.

In addition to production challenges, regional fiscal aspects are also a key focus. The Tobacco Product Excise Revenue Sharing Fund (DBH CHT) received by the Lampung Provincial Government is a crucial instrument for financing various development programs, ranging from improving raw material quality, industrial coaching, and socialization of excise regulations, to financing public health facilities. However, the high dependence on this revenue-sharing fund has not been accompanied by the strengthening of the local tobacco industrial base. Fluctuations in DBH CHT revenue and the proliferation of illegal cigarettes, which erode the region's economic potential and revenue, demand a more fundamental economic transformation strategy.

An urgent strategic solution to implement is the tobacco industry downstreaming policy. Downstreaming is not merely about building factories, but a systematic effort to create value added within Lampung Province. By encouraging the transformation of tobacco sales from merely dry leaves (raw materials) into processed products or finished goods both in the form of cigarettes and non-cigarette derivatives Lampung can extract significantly greater economic value. Downstreaming is expected to create a broad multiplier effect: developing the regional economy, expanding employment in the

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manufacturing sector, strengthening farmers' bargaining power through integrated supply chains, and increasing regional income through the optimization of cigarette excise, cigarette taxes, and other retributions.

The implementation of this downstreaming is not simple, as it potentially involves clashes among stakeholders. The economic and industrial sectors continuously push for business expansion, while the health sector and Non-Governmental Organizations (NGO) demand strict control over the impacts of tobacco consumption. On the other hand, the local government is caught between the need to develop the economy and increase regional income, and the fundamental obligation to protect public health. This disparity of interests can serve as both a major obstacle and a challenge for the formulation of tobacco downstreaming policies in Lampung Province.

Therefore, an in-depth analysis is required to map the dynamics of relationships, influence, and power among stakeholders. The use of the Matrix of Alliances and Conflicts: Tactics, Objectives, and Recommendations (MACTOR) method is highly relevant in this research (Godet, 2006). Through MACTOR analysis which has proven reliable in various policy studies (Fetoui et al., 2021; Priyono et al., 2025) it is possible to identify dominant actors, the level of convergence (agreement) towards strategic objectives, and potential divergences (conflicts) that might hinder the downstreaming program. By understanding this strategic landscape, it is expected that the Lampung Provincial Government can formulate a downstreaming policy model that is inclusive, sustainable, and capable of synergizing economic growth interests with social welfare.

Objectives

This study aims to provide a comprehensive overview of the potential for tobacco industry downstreaming in Lampung Province, as well as to formulate data-driven policy recommendations capable of strengthening the economic structure and increasing regional income. By mapping the roles of influential actors and fostering coalitions among stakeholders, this research seeks to synergize the formulation of downstreaming policies with effective stakeholder management. Consequently, it is expected that the Lampung Provincial Government can maximize the potential of the tobacco commodity as an engine of economic growth, contributing significantly to the escalation of regional revenue.

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LITERATURE REVIEW

Theoretically, the concept of downstreaming is closely related to the value-added theory, which states that every processing stage increases the economic value of a commodity (Krugman & Obstfeld, 2017). Consequently, a region or country that solely relies on exporting raw materials will have a weaker bargaining position compared to those capable of producing finished or high-tech goods. In line with this, Porter's theory of competitive advantage (1990) explains that the development of the processing industry allows a region to transition from merely relying on natural endowments toward mastering technology and innovation, which are the sources of sustainable competitive advantage.

In practice, several countries have successfully utilized downstreaming policies as a primary strategy for economic transformation. South Korea, for instance, initiated its industrialization by processing steel and simple electronics before eventually shifting to high-tech manufacturing (Amsden, 1989). In Southeast Asia, Malaysia successfully leveraged the downstreaming of palm oil to develop an oleochemical industry that now supplies the global market. Furthermore, Kaplinsky and Morris (2001) in A Handbook for Value Chain Research assert that developing countries must integrate more deeply into the global value chain to capture a larger share of the value added.

RESEARCH METHOD

This study employs a Multiple Stakeholder Analysis (MSA) model conducted through stakeholder analysis using the MACTOR (Matrix of Alliances and Conflicts: Tactics, Objectives, and Recommendations) software. The advantages of the MACTOR method over other MSA approaches include its ability to: (1) describe the role of each stakeholder in synchronizing the development of the tobacco industry; (2) illustrate the strength of the relationships among actors; (3) demonstrate the relations between actors and the objectives to be achieved; and (4) analyze actors in relation to emerging issues or problems (Bendahan et al., 2013).

Specifically, in this research on tobacco downstreaming in Lampung Province, the MACTOR analysis involves 7 (seven) main actors and 5 (five) strategic objective variables. The analyzed stakeholders consist of: 1) Regional Development Planning Agency (BAPPEDA), 2) Health Office (KESEHATAN), 3) Industry and Trade Office (PERINDAG), 4) The Plantation Office (PERKEBUNAN), 5) Tobacco Industry (INDUSTRI), 6) Tobacco Farmers (PETANI), and 7) Non-Governmental Organization (NGO). Meanwhile, the objective variables serving as the focus of convergence and divergence among the actors include: 1) Increasing the Tobacco Product Excise Revenue

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Sharing Fund (DBH CHT), 2) Public Health Protection (Kesehatan), 3) Cigarette Consumption Control (Kendali), 4) Regional Economic Development through Increased Labor and Value Added (Daerah), and 5) Illegal Cigarette Control (Ilegal).

RESULT

Within the stakeholder analysis framework using the MACTOR (Matrix of Alliances and Conflicts: Tactics, Objectives, and Recommendations) method developed by Michel Godet (2006), the Matrix of Direct Influences (MDI) is a fundamental instrument used to measure and map the level of direct influence and dependence among actors within a policy system or ecosystem. The primary objective of this matrix is to diagnose power relations, dominance hierarchies, and the relative vulnerability of each actor, independent of their strategic objectives.

Figure 2: Matrix of Direct Influences (MDI)

MDI	BAPPEDA	KESEHATAN	PERINDAG	PERKEBUNAN	INDUSTRI	PETANI	NGO
BAPPEDA	0	2	3	3	1	1	0
KESEHATAN	1	0	1	0	0	0	1
PERINDAG	1	1	0	1	1	0	0
PERKEBUNAN	1	0	1	0	0	1	0
INDUSTRI	1	3	3	1	0	4	2
PETANI	1	0	1	3	3	0	1
NGO	0	1	0	0	1	0	0

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The Matrix of Direct Influences (MDI) is used to represent the power relations among the 7 (seven) stakeholders within the tobacco downstreaming ecosystem in Lampung Province. This matrix assesses the extent to which the decisions or operations of one actor dictate those of another, using a scale ranging from 0 (no influence) to 4 (absolute influence).

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Based on the data processing results using the MACTOR method (see Figure 2), it is evident that the level of influence among actors varies significantly. The Tobacco Industry (INDUSTRI) actor records the highest level of influence, reaching a score of 3 toward the Regional Development Planning Agency (BAPPEDA), 3 toward the Industry and Trade Office (PERINDAG), and 4 toward Tobacco Farmers (PETANI). This score of 4 is the highest value within the matrix, empirically confirming that INDUSTRI is the most dominant actor in this trade system. On the other hand, BAPPEDA also possesses a considerably strong level of influence, indicated by a score of 2 toward PERINDAG and 3 toward INDUSTRI. This represents the strategic role of the regional planning authority in influencing policy direction, although its influence remains hierarchically subordinate to market forces (INDUSTRI).

Meanwhile, technical agencies such as PERINDAG possess a relatively low level of influence, with distributed scores ranging only from 0 to 1 toward other actors. This indicates that PERINDAG's capacity tends to be limited to administrative or operational-technical roles, without significant dictating power. Furthermore, Non-Governmental Organizations (NGO) are identified as the actors with the weakest level of influence within this ecosystem, recording a score of only 0 or a maximum of 1 toward all other actors. This constellation indicates that social and community groups have limited real access and power to directly influence the constellation of the downstreaming system.

2MAO	DBH CHT	Kesehatan	Kendali	Daerah	Ilegal
BAPPEDA	3	1	0	4	3
KESEHATAN	2	2	4	-1	-1
PERINDAG	2	0	-1	3	4
PERKEBUNAN	3	0	-1	3	0
INDUSTRI	-2	0	-4	1	4
PETANI	-1	0	-3	2	2
NGO	-3	2	3	-2	-2

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Figure 3: Matric of Actors Objectivies (2MAO)

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The 2MAO Matrix (Matrix of Actor-Objective Valued) is used to map the attitudes, policy directions, and intensity of interests of each actor towards the 5 (five) main objectives of tobacco downstreaming in Lampung Province. In this matrix, positive values indicate the level of agreement or support, while negative values represent the level of rejection or resistance.

Based on the data processing results (see Figure 3), the highest level of convergence (agreement) from the majority of stakeholders is directed towards the objectives of Regional Economic Development (Daerah) and Illegal Cigarette Control (Ilegal). Both objectives successfully garnered positive accumulative support scores. Specifically, the BAPPEDA, PERINDAG, and Tobacco Industry (INDUSTRI) actors provided maximum support, achieving scores ranging from 3 to 4 for these two strategic objectives.

Conversely, the objective of Cigarette Consumption Control (Kendali) emerged as the most widely rejected issue, making it the variable with the highest level of divergence among the majority of actors. Nevertheless, there is a sharp exception regarding the Health Office (KESEHATAN) and Non-Governmental Organizations (NGO), which actually provided solid support; these two actors recorded highly positive support scores, at 4 and 3 respectively, for the implementation of the Cigarette Consumption Control (Kendali) objective.

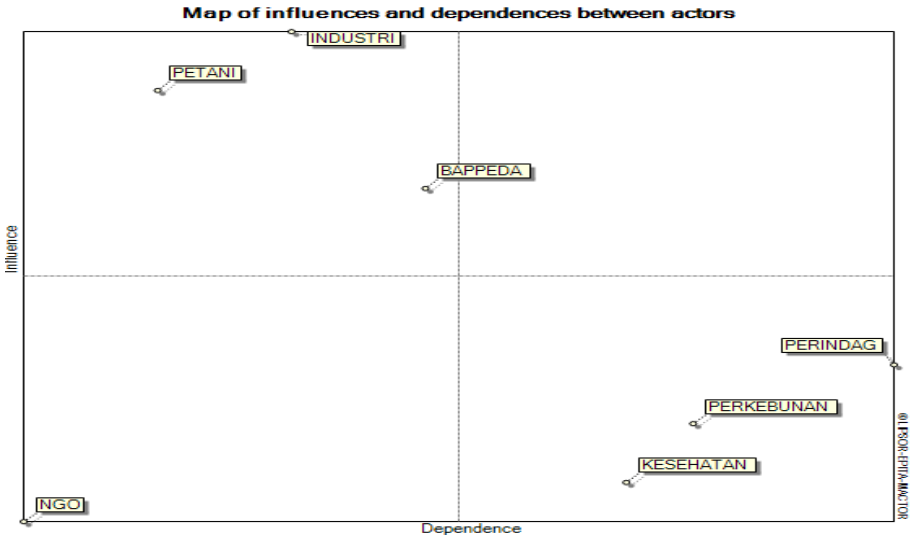


Figure 4: Map of influences and dependences between actors

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The analysis of relations among actors within the tobacco downstreaming ecosystem in Lampung Province reveals a significant polarization of power among the seven main stakeholders. Referring to the mapping results through the matrix of direct influences and the map of influences and dependences (see Figure 4), the Tobacco Industry (INDUSTRI) emerges as the most dominant actor with the highest level of influence, followed by BAPPEDA, which occupies a strategic position as the primary driver of the system. This dominance is evident from the capability of INDUSTRI to dictate raw material supply standards from Tobacco Farmers (PETANI), and the role of BAPPEDA in controlling policy directions and regional budgets. Conversely, technical agencies such as the Industry and Trade Office (PERINDAG) and The Plantation Office (PERKEBUNAN) are situated in a highly dominated position with a high level of dependence, where their operational room is heavily influenced by regulations from BAPPEDA and market dynamics created by INDUSTRI. On the other hand, although PETANI possesses bargaining power as the primary raw material provider, their position remains vulnerable due to high dependence on crop absorption by INDUSTRI, while the Non-Governmental Organization (NGO) actor tends to be in an autonomous position, operating independently outside the mainstream supply chain.

This power constellation is subsequently reflected in the alignment of actor interests toward the strategic downstreaming objectives mapped through the 2MAO matrix. There is a very strong consensus or convergence of interests between the local government and the private sector regarding the objectives of Regional Economic Development (Daerah) and Illegal Cigarette Control (Ilegal). This indicates that increasing economic value added and protecting the market from illegal products serve as the main meeting points for actors to secure regional income as well as business stability. However, the Health Office (KESEHATAN) and NGO jointly provide full support for the objective of Cigarette Consumption Control (Kendali), considering its high-risk impact on public health. Tension is also clearly evident in the issue of Increasing the Tobacco Product Excise Revenue Sharing Fund (DBH CHT), where full support from the local government clashes with resistance from the industrial sector, which is concerned about the rising excise burden. Overall, the success of tobacco downstreaming in Lampung Province highly depends on the ability of BAPPEDA and INDUSTRI to synergize economic interests, while granting greater autonomous space for technical agencies to conduct upstream coaching to protect the position of PETANI as the main pillar of raw material availability.

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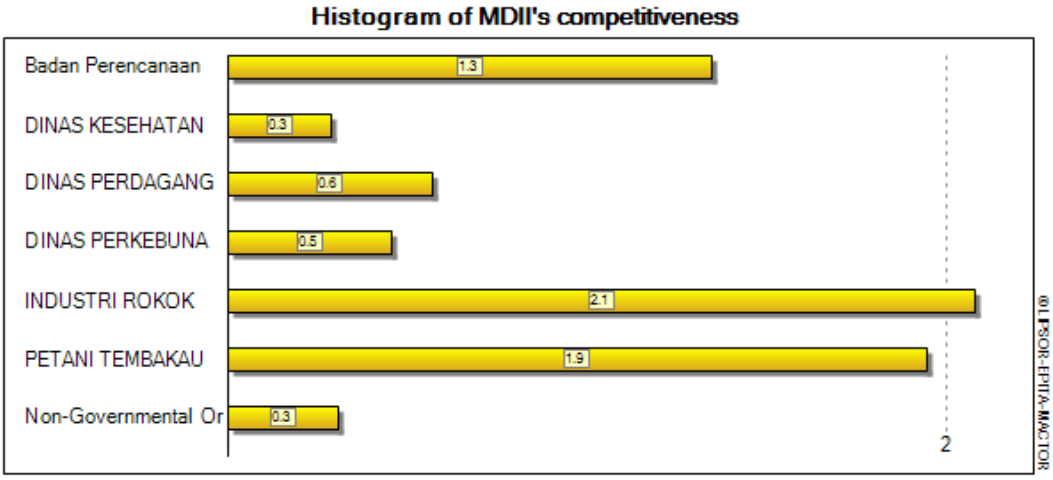


Figure 5: MDII competitiveness

Further analysis using the Matrix of Direct and Indirect Influences (MDII) (see Figure 5) measures the true competitiveness of each stakeholder by accounting for the domino effect or chain influence within the tobacco downstreaming ecosystem. Based on the calculation of competitiveness values, the Tobacco Industry (INDUSTRI) consolidates its position as the absolutely dominant actor with the highest score of 2.1. This proves that every operational maneuver by the manufacturers not only has a direct impact but also propagates indirectly throughout the entire framework of the tobacco economy in Lampung Province.

A highly interesting and crucial finding is seen in the position of Tobacco Farmers (PETANI), who rank second with a competitiveness score of 1.9, surpassing the Regional Development Planning Agency (BAPPEDA) with a score of 1.3. The high competitiveness of PETANI in this matrix although they were previously categorized as a dominated actor indicates that structurally and indirectly, the existence of the entire downstreaming supply chain heavily relies on the upstream raw material supply; if the farmers stop producing, the entire system will collapse. Meanwhile, BAPPEDA continues to hold stable regulatory control within the system. On the other hand, technical agencies such as the Industry and Trade Office (PERINDAG) (0.6) and The Plantation Office (PERKEBUNAN) (0.5), along with the Health Office (KESEHATAN) (0.3) and Non-Governmental Organizations (NGO) (0.3), are in the lowest competitiveness positions. This constellation reaffirms their limited capacity to independently create systemic change, while also confirming their roles, which are more reactive and complementary to the policies of the primary ruling actors.

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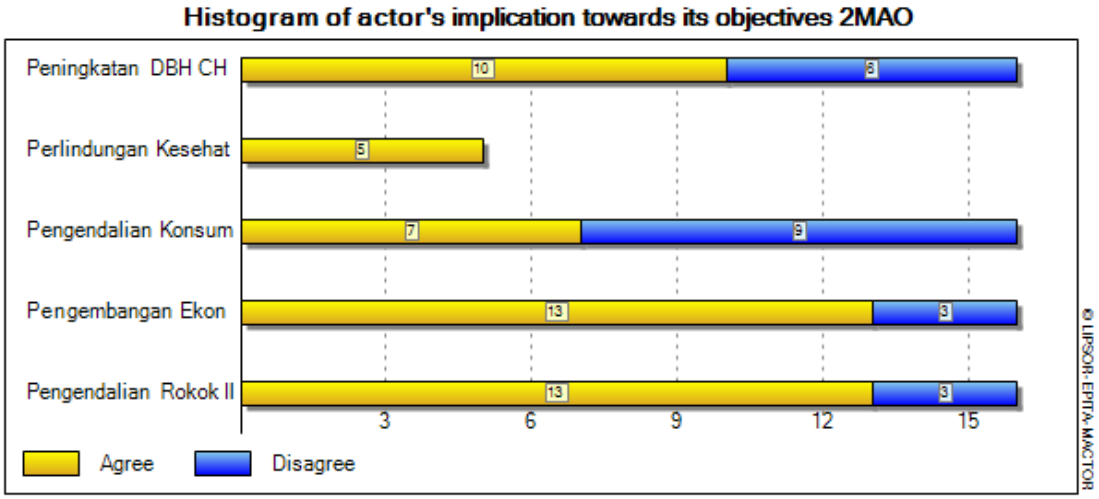


Figure 6: Histogram of actor's implication towards its objectives 2MAO

The level of involvement and implications of stakeholders regarding the strategic objectives of tobacco downstreaming (see Figure 6) demonstrate varying dynamics of agreement (convergence) and rejection (divergence) for each objective. Based on the objective implication histogram data, very strong majority support is evident for the objectives of Regional Economic Development and Illegal Cigarette Control, each recording 13 agreements against 3 rejections. This high approval rate confirms that economic value-added growth and the eradication of illegal products are the primary priority agendas successfully uniting the majority of stakeholders within this ecosystem. Conversely, the objective of Cigarette Consumption Control is confirmed as the most controversial issue, triggering the sharpest divergence, with a record of 9 rejections against 7 agreements. The dominant rejection rate on this issue is highly logical and represents fierce resistance particularly from business actors and farmers who are concerned that aggressive consumption restrictions will kill market absorption and automatically erode their income chain.

On the other hand, the issue of Increasing the Tobacco Product Excise Revenue Sharing Fund (DBH CHT) also raises clear polarization, reflected by 10 agreements accompanied by 6 rejections. This indicates that the scheme to increase excise revenue remains a push-and-pull debate between the local government's interest in expanding fiscal space and the industrial players' concerns over the increased levy burden they must

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bear. Meanwhile, the Public Health Protection objective occupies the position with the lowest implication or interest level, achieving only 5 pure agreements with zero rejections. This fact proves that although normatively no party opposes the principle of health protection, the priority and urgency of the stakeholders are empirically much more focused on improving economic trade aspects, market regulations, and excise stability rather than direct health interventions.

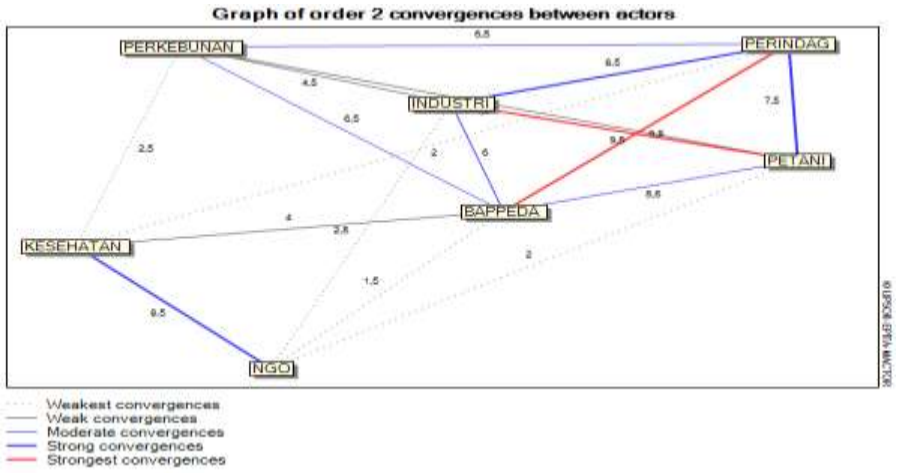


Figure 7: Graph of order 2 convergences between actors

The visualization of the level of alliances and the similarity of interests among stakeholders is further represented through the actor convergence graph (see Figure 7), which highlights the intensity of mutual support based on color indicators and line thickness. Based on the classification of these relations, the most fundamental finding is the formation of the two strongest convergence axes (marked by red lines) which separately represent the real trade axis and the bureaucratic axis, namely between the Tobacco Industry (INDUSTRI) and Tobacco Farmers (PETANI), as well as between BAPPEDA and the Industry and Trade Office (PERINDAG). The absolute bond between INDUSTRI and PETANI affirms that the reality of downstreaming success heavily relies on the upstream-downstream economic symbiosis regarding raw material absorption. Meanwhile, the solidity of BAPPEDA and PERINDAG represents the government's structural consensus in designing macro regulations and the regional investment climate.

In the next structural layer, strong convergence (thick blue lines) reveals the central role of PERINDAG, which functionally succeeds in becoming a strategic bridge by binding

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INDUSTRI on one side and PETANI on the other. This constellation simultaneously confirms the existence of a solid alternative social block outside the economic vortex, namely between Non-Governmental Organizations (NGO) and the Health Office (KESEHATAN) in guarding public health protection issues. Although the core economic axis shows good trade integration, support relations tend to loosen to a moderate level (thin blue lines) in cross-sectoral bureaucratic interactions, such as between INDUSTRI and BAPPEDA, as well as BAPPEDA's intervention towards PETANI and The Plantation Office (PERKEBUNAN).

Furthermore, institutional governance anomalies are clearly captured in the weak relations (black lines) between PERKEBUNAN and both PETANI and INDUSTRI. The agency that genuinely holds the mandate for agricultural technical coaching actually has minimal interest ties with its main constituent base in the field. This institutional fragmentation is further exacerbated by the weakest convergence (dashed lines), which visibly places NGO totally isolated from all economic driving actors (INDUSTRI, PERINDAG, PETANI), and severs the meeting point between the KESEHATAN institution and trade affairs. Overall, the mapping of this alliance network provides a strategic evaluation foundation that, although the backbone of the economic supply chain has been integrated with the regional planning vision, the acceleration of inclusive tobacco downstreaming absolutely requires intervention. This intervention is needed to restore the active role of PERKEBUNAN into the upstream coaching vortex, while pioneering cross-sectoral communication bridges to embrace social and health groups to avoid regulatory obstacles in the future.

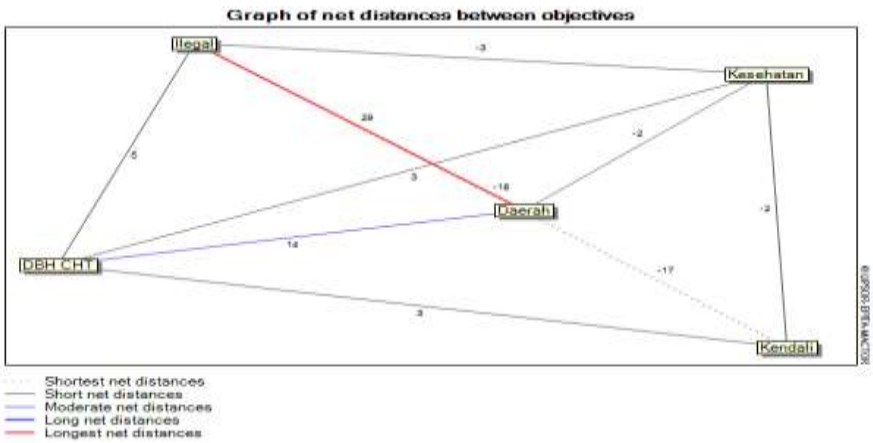


Figure 8: Graph of net distances between objectives

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The analysis of the level of alignment, collision, or polarization among the strategic downstreaming objectives is projected through the graph of net distances between objectives (see Figure 8). Based on the updated data visualization, the most surprising finding is the occurrence of the farthest distance or the sharpest spatial divergence (marked by a red line) between the objectives of Illegal Cigarette Control (Ilegal) and Regional Economic Development (Daerah). This extremely wide distance gap indicates that although both objectives share a macro-trade dimension, the configuration of actor support for them exhibits an extremely different pattern. Efforts to eradicate illegal cigarettes, which are oriented toward law enforcement (restrictive), apparently occupy a highly separate dynamic space from the scheme of economic value-added expansion (expansive) in the eyes of the stakeholders.

On the other hand, a highly crucial phenomenon that forms the center of this constellation is precisely seen in the shortest distance (dashed line), which tightly binds the objectives of Regional Economic Development (Daerah) and Cigarette Consumption Control (Kendali). This extreme proximity affirms that the issues of economic growth and consumption restriction are the two most inseparable poles, triggering a fundamental push-and-pull within this governance system. Structurally, this proximity proves that any regulatory maneuver to restrict cigarette consumption will directly, instantly, and significantly clash with the lifeblood of regional economic stability.

Meanwhile, the majority of other objective relations such as Increasing the Tobacco Product Excise Revenue Sharing Fund (DBH CHT), Public Health Protection (Kesehatan), and Illegal Cigarette Control (Ilegal) tend to cluster and interconnect at relatively close to moderate distances (marked by the convergence of black and thin blue lines). The short-distance clustering that connects DBH CHT with health and legal control issues represents the existence of a highly intertwined socio-fiscal issue cluster. In this cluster, the discourse on optimizing excise revenue is constantly overshadowed by moral demands for public health protection on the ground. Ultimately, this mapping of inter-objective distances provides a strategic warning foundation for the Lampung Provincial Government that the design of downstreaming policies cannot be implemented partially. The government is faced with a complex policy dichotomy, demanding high-level navigational expertise to formulate an equilibrium point between the ambition of spurring regional industrialization and the need to maintain ecosystem stability against the collisions of consumption restriction policies.

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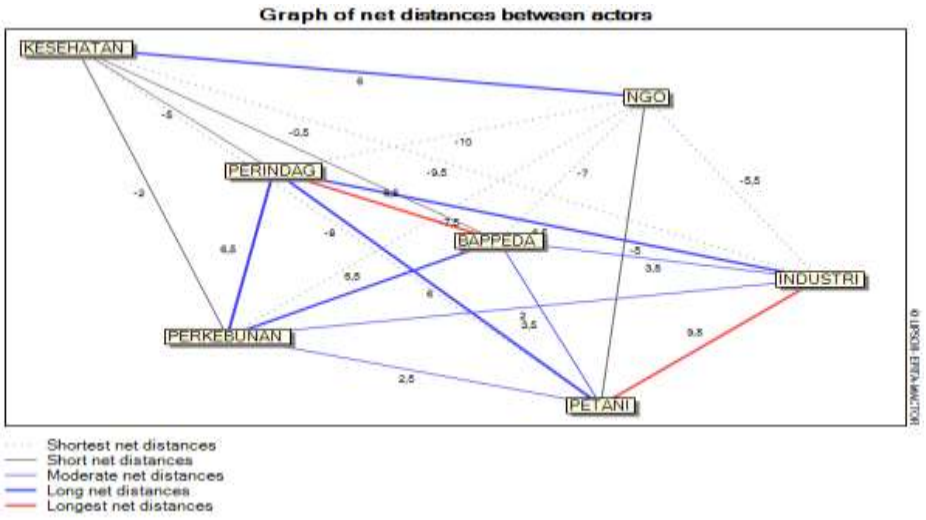


Figure 9: Graph of net distances between actors

The analysis regarding the level of gap or fundamental differences among stakeholders in responding to all downstreaming objectives is comprehensively visualized through the graph of net distances between actors (see Figure 9). Based on the updated mapping, the most prominent and crucial finding is the occurrence of the farthest distance or the sharpest spatial divergence (marked by red lines) on two main interaction axes, namely between Tobacco Farmers (PETANI) and the Tobacco Industry (INDUSTRI), as well as between the Industry and Trade Office (PERINDAG) and BAPPEDA. The extreme gap between PETANI and INDUSTRI is a logical representation of a classic structural conflict in the supply chain, where farmers' expectations for high raw material selling prices directly clash with the manufacturers' orientation to continuously suppress production costs for efficiency. On the other hand, the extremely wide distance between PERINDAG and BAPPEDA reveals a paradoxical reality in the form of friction or miscalculation within the bureaucracy, where the technical agency guarding the trade apparently has an operational interest posture that is not entirely synchronous with the macro fiscal extraction ambitions of the regional planning authority. This fragmentation is further exacerbated by the finding of wide distances (thick blue lines) between PERINDAG and real actors in the field (INDUSTRI and PETANI), which indicates an acute disconnection between trade policymakers and the actual needs of business actors in both the upstream and downstream sectors.

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Conversely, this graph presents a highly interesting structural anomaly in the mapping of the shortest distances (dashed and black lines). Unexpectedly, the Non-Governmental Organization (NGO) actor records a very close positional proximity to the government block (BAPPEDA, PERINDAG, The Plantation Office/PERKEBUNAN) and even INDUSTRI. Meanwhile, the Health Office (KESEHATAN) also tightly aligns with both PETANI and INDUSTRI. This extreme objective distance proximity across sectoral divides indicates that despite fierce debates on specific issues such as consumption restriction in aggregate, all these actors are united by massive convergence on macro issues, such as the urgency of economic development and the eradication of illegal cigarettes. The unification of the NGO and KESEHATAN positions with the economic and government groups proves that their normative orientation in guarding social welfare, community protection, and legal compliance fundamentally coincides closely with the regional development mandate.

Overall, this net distance configuration provides a strategic warning for the Lampung Provincial Government that the toughest challenge to realizing downstreaming does not actually come from social opposition groups, but rather from the urgency to patch the interest gap in the very lifeblood of the economy itself. This includes the urgent need to reconcile the price clash between upstream raw material providers and downstream absorbers, while simultaneously resynchronizing the trade vision within the government to prevent overlapping regulations that hinder the investment climate.

DISCUSSION

A comprehensive analysis of the tobacco downstreaming ecosystem in Lampung Province through the MACTOR approach reveals a policy constellation laden with power dynamics, trade integration, and deep structural paradoxes. Based on the processing results of the Matrix of Direct Influences (MDI) and the Matrix of Direct and Indirect Influences (MDII), this system is structurally controlled by power asymmetry, where the Tobacco Industry (INDUSTRI) actor holds absolute dominance with the highest competitiveness score of 2.1. However, the existence and sustainability of this ecosystem are fundamentally highly supported by the latent power of Tobacco Farmers (PETANI), who recorded a competitiveness score of 1.9 a figure that even surpasses the regional planning authority such as BAPPEDA (1.3). This high indirect competitiveness of the farmers provides an initial affirmation that the agricultural foundation at the grassroots level possesses a highly crucial leverage point, where any shock to the volume or quality of tobacco leaf production will create a domino effect that collapses the investment

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structure in the downstream sector. This reality of asymmetry and interdependence becomes a rational basis for the actors in responding to the strategic downstreaming objectives, which are subsequently clearly manifested through the Matrix of Actor-Objective Valued (2MAO).

The first hypothesis, stating that Lampung Province has great potential in developing the cigarette industry, is empirically and strongly confirmed. This potential is not merely rooted in the natural availability of raw materials but is supported by the establishment of supply chain integration and the solidity of the bureaucratic institutional climate. This is visually evidenced through the actor convergence graph, which highlights the formation of the two strongest alliance axes (marked by red lines). The first axis is the real trade axis that absolutely binds INDUSTRI with PETANI, while the second axis is the structural bureaucratic axis that solidly unites BAPPEDA with the Industry and Trade Office (PERINDAG). The formation of these two convergence axes confirms Porter's (1990) competitive advantage theory, where the prerequisite for successful industrialization requires the availability of supporting industries in the upstream sector (farmers) synergizing with a pro-investment regulatory climate from the government. In this ecosystem, PERINDAG stands out (with a thick blue convergence line) as a functional bridge capable of strategically binding INDUSTRI on one side and PETANI on the other, weaving market interests with state facilities. The structural integration captured from this alliance graph proves that Lampung Province already possesses adequate economic and governance anchors to realize the acceleration of tobacco downstreaming. The transformation process from raw commodities to value-added products in this region already has a unidirectional actor roadmap, in line with the principles of global value chain governance (Kaplinsky & Morris, 2001).

Although this potential is immense and confirmed by strong alliances, further analysis of the graph of net distances between actors uncovers a paradoxical reality serving as a critical warning for future governance. The greatest paradox is seen in the farthest distance or the sharpest spatial divergence (red lines) that precisely occurs on the two main alliance axes mentioned earlier, namely between PETANI and INDUSTRI, as well as between PERINDAG and BAPPEDA. The extreme gap between PETANI and INDUSTRI reveals that behind the operational collaboration and high crop absorption, there is a latent structural conflict regarding the high raw material purchase price debate from farmers constantly clashing with the manufacturers' demands for production cost efficiency. On the other hand, the extremely wide distance between PERINDAG and BAPPEDA indicates operational friction within the bureaucracy, where the technical

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agency guarding the trade climate (PERINDAG) apparently has an interest posture that is not entirely synchronous with the macro fiscal extraction ambitions of BAPPEDA. This fragmentation is further exacerbated by the anomalous finding regarding The Plantation Office (PERKEBUNAN), which is almost isolated from the main vortex of the supply chain. Despite these structural weaknesses, the potential for developing the cigarette industry remains deemed highly feasible considering its main foundation has been established. However, resolving this price gap and bureaucratic synchronization is absolute to ensure that industrialization does not trigger exploitation at the upstream level.

The second hypothesis, stating that the cigarette industry can increase the regional income of Lampung Province, is also significantly proven. Through the analysis of the actor implication histogram, there is a massive consensus directing towards macroeconomic optimization. The objectives of Regional Economic Development (Daerah) and Illegal Cigarette Control (Ilegal) each gained absolute approval support (13 approvals against 3 rejections), while the objective of Increasing the Tobacco Product Excise Revenue Sharing Fund (DBH CHT) also received dominant support (10 approvals against 6 rejections). This high approval rate represents the collective awareness of the majority of stakeholders that the legal cigarette industry is the primary driving engine for job creation as well as a highly relied-upon fiscal pillar by Lampung Province. The income increase scheme through DBH CHT is positioned by the local government as an essential revenue anchor to finance cross-sectoral development programs, in line with the principles of regional autonomy and economic diplomacy demanding the maximization of local revenue sources (Pujayanti, 2021). Referring to Todaro and Smith's (2015) framework, capital accumulation from the excise revenue of the tobacco processing industry is the main catalyst for accelerating regional economic transformation.

Nevertheless, the confirmation of the industry's role in increasing regional income is inseparable from a sharp policy dilemma, transparently captured through the graph of net distances between objectives. The most crucial finding is the extreme distance proximity (dashed line) between the objectives of Regional Economic Development (Daerah) and Cigarette Consumption Control (Kendali). This highly tight proximity affirms that the issues of regional income growth and consumption restriction are two highly central, inseparable poles triggering a fundamental push-and-pull, where any aggressive regulatory maneuver to restrict cigarette consumption (rejected by 9 actors against 7 approvals) will instantly collide with and erode the lifeblood of regional income. This is clarified by the farthest distance (red line) between Illegal Cigarette Control (Ilegal) and

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Regional Economic Development (Daerah), which demonstrates the complexity between law enforcement restriction efforts and commercial expansion.

Interestingly, in facing the dilemma between macroeconomic ambitions and the urgency of social health, the graph of distances between actors presents a reassuring structural anomaly. The Non-Governmental Organization (NGO) actor and the Health Office (KESEHATAN) institution, initially predicted to be pure opposition parties, actually recorded the shortest distance proximity (dashed lines) with the government block (BAPPEDA, PERINDAG, PERKEBUNAN), PETANI, and even INDUSTRI. This extreme proximity crossing sectoral divides proves that social community groups basically possess a normative orientation that closely coincides with the regional development vision, especially on the issues of eradicating illegal cigarettes, farmer welfare, and industry legal compliance. This constellation provides a very strong final conclusion: the cigarette industry is proven to be potential and capable of significantly increasing the income of Lampung Province. The toughest challenge in realizing the political economy of this downstreaming does not actually stem from the rejection of pro-health groups, but relies on the local government's proficiency in reconciling price clashes within the supply chain itself, mitigating overlapping authorities within the bureaucracy, and formulating middle-ground regulations capable of protecting industrial investment without neglecting the social community protection mandate.

CONCLUSION

Based on a series of relationship analyses, interest convergence, and stakeholder mapping using the MACTOR approach, it can be concluded that the hypothesis regarding the immense potential of tobacco downstreaming and its role in increasing the regional income of Lampung Province has been empirically and significantly proven. This downstreaming ecosystem is supported by a solid structural foundation through the formation of two main alliance axes: the real trade axis tightly binding the Tobacco Industry (INDUSTRI) with Tobacco Farmers (PETANI), and the bureaucratic axis uniting the macro vision of BAPPEDA with the Industry and Trade Office (PERINDAG). The absolute consensus from the majority of stakeholders on the efforts of Regional Economic Development, Illegal Cigarette Control, and Increasing the Tobacco Product Excise Revenue Sharing Fund (DBH CHT) confirms that the cigarette industry functions as the primary driving motor for job growth as well as an essential fiscal revenue anchor for regional development. Nevertheless, this downstreaming governance holds a structural paradox and deep vulnerability. Behind the solid operational alliances, there is an

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extremely sharp divergence of interest distance between PETANI and INDUSTRI due to a latent clash regarding high raw material selling prices versus manufacturing production efficiency, as well as orientation friction within the bureaucracy between BAPPEDA and PERINDAG. Furthermore, although there is a sharp dilemma between economic expansion ambitions and cigarette consumption restriction efforts, this constellation surprisingly proves that the Non-Governmental Organization (NGO) actor and the Health Office (KESEHATAN) institution have a close orientation with the local government. This affirms that social community groups are basically not an opposition rejecting industrial development, but rather potential partners aligned on the issues of eradicating illegal markets and legal compliance, provided that health impact mitigation is accommodated.

Therefore, to ensure the sustainability of an inclusive and equitable downstreaming program, the Lampung Provincial Government is recommended to immediately formulate a middle-ground trade regulation capable of mediating the latent price conflict between farmers and the industry, for example through the initiation of a transparent and mutually beneficial supply chain partnership (contract farming) scheme. At the institutional level, it is highly urgent to conduct internal bureaucratic consolidation to align the operational vision between BAPPEDA and PERINDAG to prevent investment policy miscalculations, while simultaneously reintegrating the crucial role of The Plantation Office (PERKEBUNAN) which has been isolated so far to resume leading technical coaching in the agricultural upstream sector. Finally, the expanded fiscal space obtained from the DBH CHT optimization must be managed with equitable redistribution principles. The allocation of these funds must not be solely focused on macro-infrastructure expansion but must be proportionally earmarked to strengthen post-harvest technological capacity for local farmer communities, as well as to fund public health impact mitigation programs formulated with the active participation of NGO and the Health Office (KESEHATAN).

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