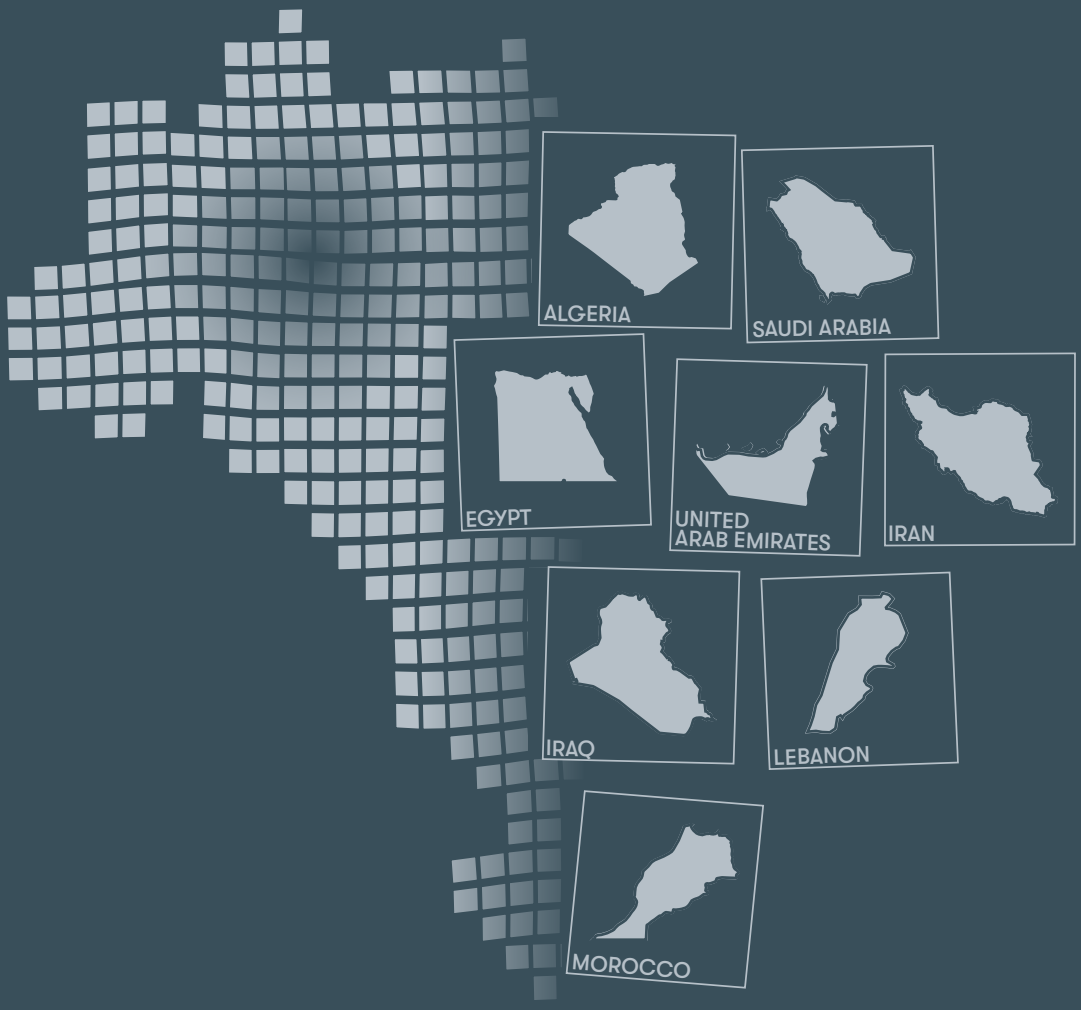
RADAR VERDE

BEEF TRANSPARENCY IN THE BRAZILIAN AMAZON



MIDDLE EAST AND NORTH AFRICA COUNTRIES

The extent to which Brazilian beef companies, licensed to export to major MENA countries, demonstrate control over the suppliers to avoid deforestation in the Amazon

2025

1 Introduction

The Middle East and North Africa (MENA) countries have become a strategic market for Brazilian beef. In 2025, exports to these countries reached US$1.79 billion, which is equivalent to approximately 10% of the total (US$18 billion) beef exported in 2025. (Times Brasil, 2026). This market gained further relevance in 2026, when MENA countries began to emerge as an alternative destination for part of the Brazilian beef that would otherwise have gone to China after the introduction of Chinese tariff quotas. The shift matters for two reasons. It helps Brazil diversify commercial risk, and it connects Middle East and North Africa food security more directly to the performance of the Brazilian beef supply chain. The importance of this trade is reinforced by the fact that several Middle Eastern buyers tend to import higher value-added cuts, which raises the economic weight of these markets for Brazilian exporters.

This commercial relevance comes with clear market requirements. In many MENA countries, halal certification is a basic condition for access to the beef market. It applies to slaughter, but it also extends to handling, packaging, transport, storage, and labeling. Therefore, the issue at stake is broader than religious compliance. MENA beef imports are shaped by standards, traceability, and trust in the integrity of the supply chain. Brazil already holds a leading position in halal meat exports, which creates an opportunity. At the same time, that position raises expectations that Brazilian suppliers will be able to demonstrate consistency between commercial expansion and credible socio-environmental safeguards. (Amazônia 2030)

This discussion becomes even more urgent in the context of food security in the Middle East and North Africa. Many countries in the region depend heavily on food imports and face structural constraints, including water scarcity, climate stress, and limited room to expand domestic agricultural production. In that context, climate change increases food security risks through both prices and availability. The effect is not restricted to crops. Recent evidence shows that warming tends to raise food prices, while the livestock literature indicates that heat stress reduces cattle weight gain, fertility, and productivity, and that drought lowers pasture quality while increasing feed, water, and animal health costs. Beef production can therefore become more expensive and less stable precisely when importing countries need a reliable supply. For food-importing regions, climate resilience in exporting countries is no longer a secondary concern. It is part of food security itself (IPCC, 2022; Kotz et al., 2024; Nardone et al., 2010; Rojas-Downing et al., 2017; Wheeler & von Braun, 2013). (IPCC)

In Brazil, this issue is even more consequential because cattle ranching is closely tied to the country's emissions profile. Official Brazilian sources indicate that land use, land-use change and forestry remain the largest source of national greenhouse-gas emissions. In the federal Plano Clima for agriculture and livestock, 53.8% of gross emissions associated with the sectoral production sphere in 2022 came from land-use change in agricultural areas. In agriculture and livestock, enteric fermentation was the largest source of emissions, accounting for 65.0% of sector emissions, and methane from ruminant enteric fermentation came overwhelmingly from cattle. This pattern is consistent with land-use data from the Amazon: more than 90% of deforested areas in the biome had pasture as their first use. For that reason, curbing deforestation is not just a conservation objective. It is a necessary condition for reducing emissions in one of the main channels through which Brazilian cattle production affects climate stability and, by extension, food security (Ministério do Meio Ambiente e Mudança do Clima [MMA], 2025; Ministério da Ciência, Tecnologia e Inovação [MCTI], 2025; MapBiomas, 2024). (Serviços e Informações do Brasil)

The link between deforestation and food security is not abstract. Research on Brazil shows that forest loss reduces rainfall and agricultural revenues in the Amazon and that deforestation-induced rainfall changes have already lowered soybean and maize yields. This means that the same process that expands emissions can also undermine the climatic conditions needed for agricultural production. The recent Brazilian experience adds a further warning. Climate extremes have intensified, with record heat, prolonged drought, and severe hydrological stress already affecting the country. In such a setting, the case for zero deforestation becomes stronger over time. It is a matter of climate mitigation, adaptation, and supply security at once (Leite-Filho et al., 2021; Batista et al., 2023; Centro Nacional de Monitoramento e Alertas de Desastres Naturais [Cemaden], 2026). (Nature)

This is why market demand for sustainability matters. Studies show that zero deforestation is unlikely to be achieved by public policy alone or by voluntary market commitments in isolation. Progress depends on the combination of durable public policies, stronger incentives to raise productivity on already cleared land, greater transparency, and market restrictions against products associated with new deforestation. Brazilian experience also shows a clear temporal pattern. When enforcement and policy signals were stronger, deforestation fell sharply. When those signals weakened, deforestation rose again. That lesson is particularly relevant now, because climate shocks in Brazil are becoming more severe and because beef cattle represent the single largest activity in the Central Bank's mapping of medium- and high-transition-risk exposure, totaling R$127 billion, or 32% of such exposures. A credible long-term commitment to zero deforestation, sustained across political cycles, is therefore increasingly important for the resilience and legitimacy of the beef sector (Barreto, 2021; Barreto et al., 2025; Banco Central do Brasil, 2022). (Amazônia 2030)

Against this background, this report assesses whether slaughterhouses licensed to export beef from the Brazilian Amazon to major MENA countries demonstrate robust socio-environmental safeguards. The analysis is based on the 2025 Radar Verde results, which evaluate the extent to which beef companies have adopted and implemented zero-deforestation policies capable of preventing direct and indirect links between exported beef and deforestation in the Amazon. By identifying which companies are more advanced in controlling their supply chains, the report contributes to a practical agenda: improving food security, reducing climate risk, and strengthening the credibility of Brazil-MENA beef trade.

2 Socio-environmental performance of Amazon slaughterhouses licensed to export to major MENA countries

Slaughterhouses in the Legal Amazon licensed to export to major Middle East and North Africa (MENA) region, such as Algeria, Saudi Arabia, Egypt, United Arab Emirates (UAE), Iran, Iraq, Lebanon and Morocco, represent about 58% of the total slaughter capacity in the Amazon region (Radar Verde, 2025). In the Legal Amazon, there are 72 slaughterhouses and 32 beef companies licensed to export to MENA countries.

Among these slaughterhouses, 54% demonstrate a high level of control over their direct suppliers, accounting for 35% of the total slaughter capacity in the Amazon (Table 1). However, none of them has demonstrable control over their indirect suppliers. Overall, 60% of these slaughterhouses have low control over their cattle supply chain, and 40% have very low control, as indicated by the Radar Verde assessment in 2025.

Table 1. Level of commitment against deforestation by slaughterhouses in the Brazilian Amazon licensed to export to major MENA countries.

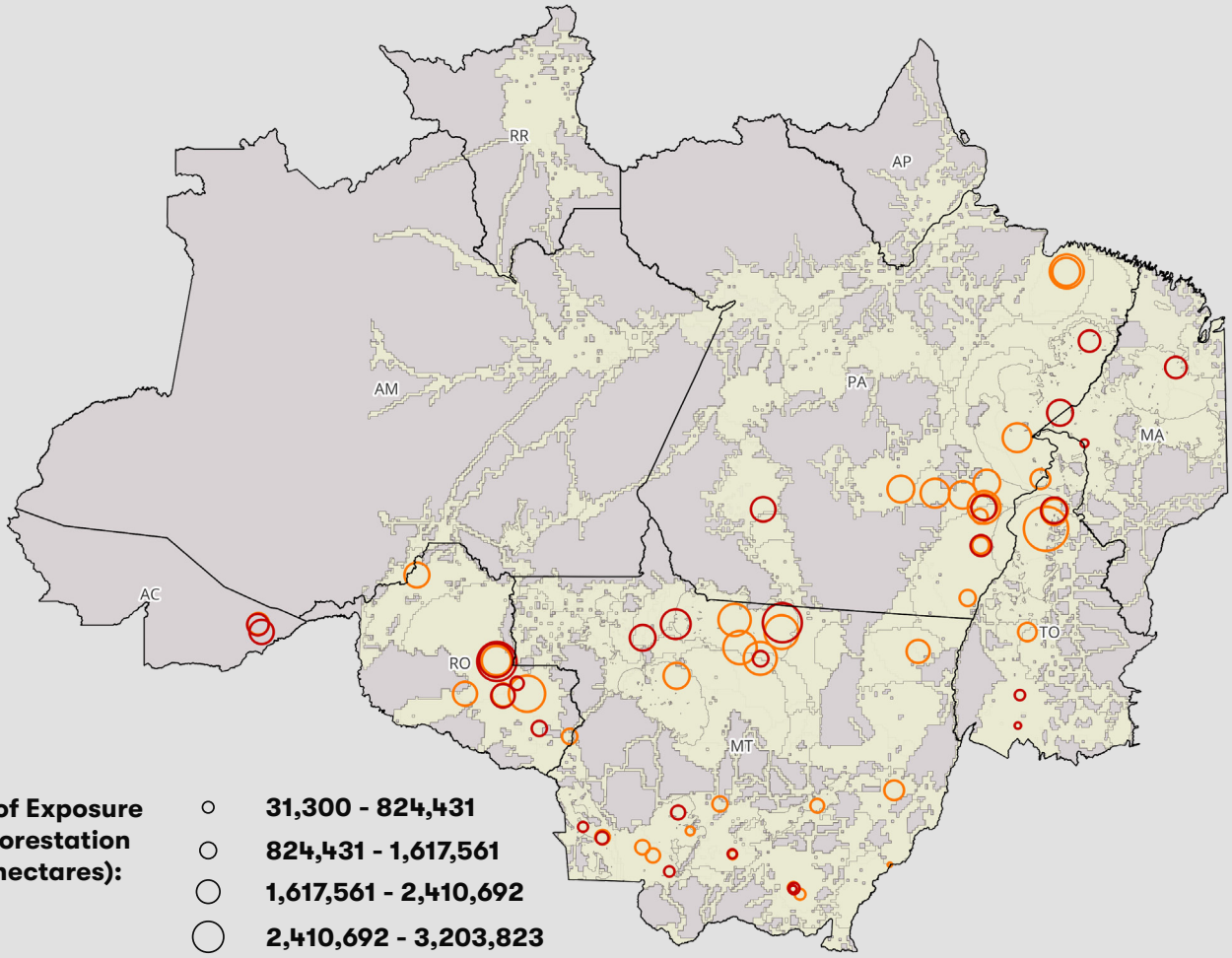
SLAUGHTERHOUSES	SIF	UF	MUNICIPALITY	SIGNATORY OF THE FEDERAL PROSECUTORS SETTLEMENT AGREEMENT AGAINST DEFORESTATION (TAC)?	LEVEL OF COMMITMENT AGAINST DEFORESTATION			LEVEL OF EXPOSURE TO DEFORESTATION RISK (HECTARES)	Algeria	Saudi Arabia	Egypt	United Arab Emirates (UAE)	Iran	Iraq	Lebanon	Morocco
					DIRECT SUPPLIER (DIRECT FARMS)	INDIRECT SUPPLIER (INDIRECT FARMS)	OVERALL SCORE									
Marfrig Global Foods S/A	2015	MT	VÁRZEA GRANDE	YES	78	2.9	40.4	144,419			X	X		X		X
Masterboi Ltda	2437	PA	SÃO GERALDO DO ARAGUAIA	YES	75.4	2.9	39.1	918,785		X	X	X	X		X	X
Masterboi Ltda	860	TO	NOVA OLINDA	YES	75.4	2.9	39.1	4,790,084		X	X	X	X			
JBS S/A	3000	MT	DIAMANTINO	YES	75.7	2.4	39.1	510,480			X	X	X		X	X
JBS S/A	2880	RO	PIMENTA BUENO	YES	75.7	2.4	39.1	3,253,021		X	X	X	X	X	X	X
JBS S/A	3470	MT	CONFRESA	YES	75.7	2.4	39.1	1,286,291			X	X			X	X
JBS S/A	4268	MT	COLÍDER	YES	75.7	2.4	39.1	2,683,851			X	X	X		X	X
JBS S/A	4149	RO	PORTO VELHO	YES	75.7	2.4	39.1	1,510,753			X	X				
JBS S/A	4333	RO	VILHENA	YES	75.7	2.4	39.1	527,250			X	X		X	X	X
JBS S/A	2350	PA	TUCUMÃ	YES	75.7	2.4	39.1	2,053,336			X	X				
JBS S/A	4121	MT	ÁGUA BOA	YES	75.7	2.4	39.1	914,441			X					
JBS S/A	4302	MT	ALTA FLORESTA	YES	75.7	2.4	39.1	2,566,988			X	X	X			
JBS S/A	2979	MT	ARAPUTANGA	YES	75.7	2.4	39.1	464,004			X	X	X			X
JBS S/A	2019	MT	PEDRA PRETA	YES	75.7	2.4	39.1	226,685			X	X	X		X	
JBS S/A	4001	TO	ARAGUAÍNA	YES	75.7	2.4	39.1	1,602,111		X	X	X				X
JBS S/A	2951	AC	RIO BRANCO	YES	75.7	2.4	39.1	1,111,942			X					
JBS S/A	42	MT	BARRA DO GARÇAS	YES	75.7	2.4	39.1	31,300			X	X	X			
JBS S/A	51	MT	PONTES E LACERDA	YES	75.7	2.4	39.1	461,972			X	X	X		X	X
JBS S/A	175	RO	SÃO MIGUEL DO GUAPORÉ	YES	75.7	2.4	39.1	1,397,871		X	X	X	X		X	X
JBS S/A	200	MT	JUARA	YES	75.7	2.4	39.1	1,653,726		X	X		X			
JBS S/A	457	PA	MARABÁ	YES	75.7	2.4	39.1	2,046,897			X	X			X	X
JBS S/A	807	PA	REDENÇÃO	YES	75.7	2.4	39.1	649,328		X	X					
JBS S/A	1110	PA	SANTANA DO ARAGUAIA	YES	75.7	2.4	39.1	585,821		X	X	X	X		X	X
Minerva	2911	MT	MIRASSOL D'OESTE	YES	74.4	2.9	38.6	437,495		X	X	X	X	X		X
Minerva	2500	MT	PARANATINGA	YES	74.4	2.9	38.6	402,670			X	X	X			X
Minerva	1940	TO	ARAGUAÍNA	YES	74.4	2.9	38.6	1,620,072			X	X	X			X
Minerva	791	RO	ROLIM DE MOURA	YES	74.4	2.9	38.6	1,284,355			X		X			X
Frigorifico Rio Maria	112	PA	RIO MARIA	YES	73.8	2.9	38.4	489,286		X	X	X				
Frigorifico Rio Maria	101	PA	CANAÃ DOS CARAJÁS	YES	73.8	2.9	38.4	1,736,601			X	X				
Frigol S/A	4150	PA	SÃO FÉLIX DO XINGU	YES	73.3	2.9	38.1	1,751,716	X	X	X	X	X		X	X
Frigol S/A	2583	PA	ÁGUA AZUL DO NORTE	YES	73.3	2.9	38.1	1,872,992			X	X			X	X
Plena Alimentos Ltda	3215	TO	PARAÍSO DO TOCANTINS	YES	75	0	37.5	789,888			X	X			X	
Mercúrio Alimentos S/A	4554	PA	CASTANHAL	YES	74.3	0	37.2	1,933,751			X	X				X
Mercúrio Alimentos S/A	4413	PA	XINGUARA	YES	74.3	0	37.2	2,653,512			X	X	X			X
Vale Grande Indústria e Comércio de Alimentos S/A (Frialto)	2937	MT	NOVA CANAÃ DO NORTE	YES	74.4	0	37.2	2,742,233			X	X				
Vale Grande Indústria e Comércio de Alimentos S/A (Frialto)	4490	MT	MATUPÁ	YES	74.4	0	37.2	2,833,579		X	X	X				X
Vale Grande Indústria e Comércio de Alimentos S/A (Frialto)	3405	RO	JI-PARANÁ	YES	74.4	0	37.2	2,126,735		X	X	X	X		X	X
Ativo Alimentos Exportadora e Importadora Eireli (Mafrinorte)	2801	PA	CASTANHAL	YES	73.9	0	37	2,849,341		X	X	X				X
Naturafrig Alimentos Ltda	1811	MT	BARRA DO BUGRES	YES	73.3	0	36.7	135,319	X	X	X	X			X	X
LKJ - Frigorífico Ltda	723	TO	ARAGUAÍNA	YES	69.5	0	34.8	1,670,891		X			X		X	
Agra Agroindustrial de Alimentos S/A	3941	MT	RONDONÓPOLIS	YES	68	0	34	256,536		X	X					
Frigorifico Valencio Ltda	1891	PA	XINGARA	NO	67.4	0	33.7	1,666,998		X	X	X	X			X
Frigorifico Pantanal	585	MT	VARZEA GRANDE	NO	62.4	0	31.2	106,289		X	X	X	X		X	X
Boi Brasil	1723	TO	ALVORADA	NO	50.7	0	25.4	58,388		X	X	X	X			X
Boi Brasil	2852	TO	ARAGUAÍNA	NO	50.7	0	25.4	1,651,317		X	X	X				X
Frigorifico Redentor S/A	411	MT	GUARANTÃ DO NORTE	YES	39.5	0	19.8	3,756,090		X	X		X			X
Golden Imex Eireli (Bmg Food's)	2620	MT	JURUENA	NO	31.5	0	15.8	1,618,061		X	X		X		X	
Cooperativa dos Produtores de Carne e Derivados de Carne (Cooperfrigu)	93	TO	GURUPI	YES	28.16	0	14.08	199,521		X	X					
Frigorifico Fortefrigo Ltda	372	PA	PARAGOMINAS	YES	6.6	0	3.3	1,094,009		X	X		X		X	
Fribev - Frigorífico Bela Vista	4398	PA	XINGUARA	YES	5.8	0	2.9	1,521,978		X	X		X		X	
Indústria Frigorífica Boa Carne Ltda	5125	MT	COLÍDER	NO	5.6	0	2.8	538,703		X		X	X		X	X
Irmãos Gonçalves, Comércio e Indústria Ltda	2443	RO	JARU	NO	1.9	0	1	1,440,543		X	X	X				X
Rio Beef Frigorífico	4267	RO	JI-PARANÁ	NO	1.76	0	0.88	3,789,616	X		X	X	X		X	
Frigoestrela S/A	1886	MT	RONDONÓPOLIS	NO	0.8	0	0.4	252,761			X					
Comcarne Comercial de Carne Ltda (Fribal)	1339	MA	IGARAPÉ DO MEIO	NO	0,4	0	0.2	1,109,457		X						
Comcarne Comercial de Carne Ltda (Fribal)	2431	MA	IMPERATRIZ	NO	0,4	0	0.2	94,588		X	X	X			X	
Distriboi	4695	RO	JI - PARANÁ	NO	0.3	0	0.2	2,827,823		X	X	X	X		X	X
Distriboi	4334	RO	ROLIM DE MOURA	NO	0.3	0	0.2	1,338,144		X	X		X		X	X
Vale Company Comércio e Serviços LTDA	4466	MT	RONDONÓPOLIS	NO	0.3	0	0.2	72,053			X	X				
Pantaneira Indústria e Comércio de Carnes e Derivados	1206	MT	VARZEA GRANDE	YES	0	0	0	148,681		X	X	X			X	X
Abatedouro de Bovinos Sampaio Ltda	2258	PA	REDENÇÃO	YES	0	0	0	1,045,624		X	X		X		X	
Frigorifico Monte Verde LTDA (Nome Atual: Grancarnes)	5018	MT	NOVA MONTE VERDE	NO	0	0	0	2,181,055		X	X					X
Frigomarca	4686	PA	NOVO PROGRESSO	NO	0	0	0	1,472,642		X	X	X			X	
Frisacre Frigorífico Santo Afonso do Acre LTDA	3297	AC	RIO BRANCO	NO	0	0	0	1,106,695		X	X	X			X	X
Frisacre Frigorífico Santo Afonso do Acre LTDA	4488	RO	CACOAL	NO	0	0	0	372,740				X				
Frisacre Frigorífico Santo Afonso do Acre LTDA	1777	MT	CÁCERES	NO	0	0	0	203,695				X				
Frigomarca	4086	AC	SENADOR GUIOMARD	NO	0	0	0	1,429,097		X	X	X	X		X	
Fortunceres S.A	3250	RO	CHUPINGUAIA	YES	0	0	0	508,922			X	X	X		X	X
Fortunceres S.A	1751	MT	TANGARÁ DA SERRA	YES	0	0	0	419,350			X	X	X			
R.C. Moreira Costa - Frical	2927	PA	RONDON DO PARÁ	NO	0	0	0	1,626,973			X	X				
Fortunceres S.A	1900	MT	PONTES E LACERDA	YES	0	0	0	329,576		X	X	X	X		X	X
Frigorifico Vila Bela	5393	MT	VILA BELA DA SANTÍSSIMA TRINDADE	NO	0	0	0	181,945			X	X				

> 90	Very high policy effectiveness
70 - 89	High policy effectiveness
50 - 69	Intermediate policy effectiveness
30 - 49	Low policy effectiveness
0 - 29	Very low policy effectiveness

Source of information: Radar Verde, 2025.

Figure 1 reveals where are the slaughterhouses in the Legal Amazon that supply beef to the main Middle East and North Africa countries, and how vulnerable those supply chains are to deforestation risk. Shaded areas show estimated cattle sourcing zones, while circles mark slaughterhouses; the larger the circle, the greater the area exposed to deforestation risk. Circle colors indicate each company's commitment to deforestation-free policies, and many score low or very low. The map shows a clear pattern: slaughterhouses with broader sourcing zones—particularly in Pará, Mato Grosso, Rondônia, and Acre—and weak control over indirect suppliers face the highest deforestation risk. The level of commitment against deforestation reflects the strength of companies' socio-environmental policies and their implementation, assessed through performance in independent audits, while the level of exposure to deforestation risk corresponds to the potential sourcing area in which slaughterhouses operate and may purchase cattle from illegally deforested areas.

Figure 1. Slaughterhouses licensed to export to major MENA countries: Level of Exposure to Deforestation Risk, Potential Cattle Purchase Zones, and Level of Commitment Against Deforestation.



Level of Exposure to Deforestation Risk (hectares):

- 31,300 - 824,431
- 824,431 - 1,617,561
- 1,617,561 - 2,410,692
- 2,410,692 - 3,203,823
- 3,203,823 - 3,996,953
- 3,996,953 - 4,790,084

Level of Commitment Against Deforestation:

- Low
- Very Low
- Potential Cattle Purchase Zone
- Legal Amazon

Source: Radar Verde, 2025.

3 Recommendations

How can MENA countries reduce the risk of importing beef associated with deforestation while preserving a strategically relevant supply relationship with Brazil?

This report suggests a feasible answer. Radar Verde can be used as a supplier-differentiation tool, helping buyers identify exporters with stronger zero-deforestation controls and bringing these criteria into procurement, trade facilitation, and investment decisions. This approach fits a market that already has scale and strategic relevance, while supplier performance remains uneven (Times Brasil, 2026; Radar Verde, 2025).

The commercial context gives MENA countries room to act. Brazilian beef exports to Arab countries reached US$1.79 billion in 2025, marking the second consecutive year of growth. Six Arab countries — Egypt, Saudi Arabia, Algeria, the United Arab Emirates, Lebanon, and Libya — are ranked among the top 20 destinations for Brazilian beef (Times Brasil, 2026). As a result, MENA demand already shapes incentives in the sector. In that context, a more selective sourcing strategy could strengthen supply governance while preserving commercial continuity.

The report's quantitative findings explain why differentiation matters. Slaughterhouses in the Legal Amazon licensed to export to major MENA markets account for about 58% of the region's slaughter capacity. Yet only 54% of these plants show a high level of control over direct suppliers, corresponding to 35% of the Amazon's total slaughter capacity. No slaughterhouse demonstrates control over indirect suppliers. Overall, 60% of these slaughterhouses have low control over their cattle supply chain and 40% have very low control (Radar Verde, 2026). Sanitary approval and halal certification therefore remain essential, while confidence about deforestation risk still depends on additional evidence across the full cattle chain.

The main bottleneck appears in the earlier stages of production. Companies that have adopted some form of zero-deforestation policy still concentrate monitoring on fattening farms, while breeding farms receive weaker scrutiny. That pattern matters because breeding farms remain associated with deforestation in the Amazon (Barreto et al., 2023). Low transparency adds a second barrier. As a result, buyers often face high information costs when trying to identify the exporters with the strongest zero-deforestation controls. Radar Verde can lower those costs and support more consistent decisions.

A practical way forward would be a preferred-supplier approach. Importers, public purchasing agencies, sovereign funds, retailers, halal operators, and food distributors could give preference to companies that combine four characteristics already visible in Radar Verde: a public zero-deforestation policy, stronger direct-supplier controls, disclosure of implementation results, and purchase zones with lower exposure to deforestation risk. Companies outside that group could remain in commercial dialogue under improvement plans, annual disclosure, and time-bound milestones for expanding control toward indirect suppliers. This approach would allow buyers to reduce risk gradually while preserving flexibility in trade relations.

As shown in Table 1, existing cooperation channels between Brazil and MENA countries already provide practical entry points for a more operational sustainability agenda. The public record shows active cooperation in trade expansion, sanitary facilitation, degraded-pasture recovery, and investment mobilization. In this setting, Radar Verde could serve as a common benchmark for linking these channels to supplier-level sustainability performance, reducing information costs and giving governments, importers, and investors a clearer basis for differentiated engagement (Brazil, 2023; Brazil Agency, 2023; Valor International, 2026; see Table 1). For example, in halal trade-promotion initiatives, Radar Verde could help identify which exporters are better positioned to combine halal compliance with stronger zero-deforestation controls. In sanitary and trade-facilitation arrangements, the tool could support the selection or prioritization of suppliers that disclose stronger direct-supplier controls and clearer implementation results. In pasture-recovery and investment discussions, Radar Verde could help direct capital toward slaughterhouses, supply chains, and territories with lower deforestation exposure and stronger governance conditions.

Used in these ways, Radar Verde would help translate existing cooperation into a more credible pathway for beef production on already cleared land, with lower deforestation risk and greater long-term security for both Brazil and importing countries.

On the Brazilian side, several institutional adjustments could raise the credibility of this agenda. Improved access to the GTA (Animal Transit Guides), which are official documents used by states to record the movement of cattle, would strengthen export-related due diligence. A gradual integration of SISBOV with CAR and deforestation data would allow traceability to evolve beyond sanitary control. SISBOV (Brazilian System of Individual Identification of Cattle and Buffaloes), the official system of the Ministry of Agriculture and Livestock (MAPA) designed to track cattle from birth to slaughter, is currently used primarily for exports to the European Union. CAR (Rural Environmental Registry) is the national environmental registry of rural properties. Financial incentives could more clearly target producers and slaughterhouses operating in areas with lower deforestation risk and stronger legal compliance. These measures build on existing systems and programs, making implementation more realistic from an administrative perspective.

Table 2. Main Brazil–Middle East and North Africa cooperation tracks relevant to beef and the sustainability gap they still need to address

Initiative / partner	Main objective	Timeframe / current status	Main gap related to sustainability	How Radar Verde can support implementation
Halal do Brasil (Arab-Brazilian Chamber of Commerce and Brazilian Trade and Investment Promotion Agency)	Expand Brazilian halal exports through trade promotion, fairs, training, and business matchmaking	Active. By early 2025, it supported 124 companies, reached 156 countries, and promoted Brazilian products in markets such as the United Arab Emirates, Saudi Arabia, and Egypt (Arab-Brazilian News Agency, 2025, 2026).	The platform is commercially strong, but there is no public indication that promotion is linked to zero-deforestation performance.	Use Radar Verde as a filter for export promotion. Firms featured in halal initiatives should disclose their deforestation-risk controls and improvement targets.
Brazil–Egypt meat-trade facilitation	Speed up and institutionalize trade in beef and other animal products	Active since the February 2024 protocol. In 2025, the bilateral agenda advanced on equivalence, also called pre-listing, and discussion of electronic certification for animal products (Presidency of the Republic of Brazil, 2024; Ministry of Agriculture and Livestock of Brazil, 2025).	Trade facilitation is advancing, but supplier-level sustainability screening is not yet visible in the public record.	Egypt could require Radar Verde disclosure for pre-listed exporters or use it to prioritize suppliers with stronger direct-supplier control and transparency.
Brazil–Saudi Arabia trade and investment agenda	Expand bilateral trade and attract investment in food security, agriculture, and logistics	Active. In June 2024, Brazil presented the National Program for the Conversion of Degraded Pastures to Saudi authorities and business representatives. The investment dialogue advanced in September 2024 (Ministry of Agriculture and Livestock of Brazil, 2024a, 2024b).	Investment and food-security dialogue are active, but there is no public beef-specific sustainability benchmark attached to them.	Saudi importers and investors could use Radar Verde as a due-diligence tool for procurement, joint ventures, and sustainable cattle-chain financing.
Brazil–Gulf Cooperation Council Strategic Dialogue	Deepen cooperation on trade, food security, and investment between Brazil and Gulf Cooperation Council members	Active since the first ministerial meeting in September 2024 (Ministry of Foreign Affairs of Brazil, 2024a).	The dialogue is high level and strategic, but there is no common Gulf Cooperation Council benchmark yet for sustainable beef procurement.	Gulf Cooperation Council members could adopt Radar Verde as a shared reference for public procurement, food-security stocks, and trade-finance screening.
Brazil–United Arab Emirates bilateral agenda and Southern Common Market–United Arab Emirates negotiations	Expand trade, investment, and strategic cooperation	Mercosur–United Arab Emirates free trade talks began in July 2024 and had completed four rounds by March 2026. In parallel, Brazil and the United Arab Emirates expanded bilateral investment cooperation, creating a joint mechanism in November 2024 to promote Emirati investment in strategic sectors in Brazil. (Ministry of Foreign Affairs of Brazil, 2024b; Ministry of Finance of Brazil, 2026).	Sustainability is present in strategic language, but not yet as an operational supplier-selection rule for beef.	United Arab Emirates importers, retailers, and investors could use Radar Verde to direct sourcing and capital toward exporters with stronger traceability and lower deforestation exposure.

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