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Grain and livestock markets are being driven by energy-linked input risk, fund positioning, and mixed trade signals, while Brazil faces weather damage, diesel shortages, and export exposure. This brief also highlights measurable returns from regenerative soil systems, organic row-crop management, and practical livestock and crop-input execution.

1) Market Movers

- **United States - grains:** Price action stayed headline-driven. On the week ending before March 23, May corn settled at **465.5¢** (-1.75¢), May soybeans at **1161.25¢** (-48¢), and May SRW wheat at **595.25¢** (-18.5¢) [1]. Friday pressure was tied to profit-taking, technical selling, a stronger U.S. dollar, and rain prospects for the Southern Plains wheat belt [2].
- **March 23 rebound:** Early trade then turned higher, with May corn at **$4.73 1/4**, May soybeans at **$11.69 1/2**, and May Chicago wheat at **$6.05** [2]. The drivers cited were Iran/Hormuz tension, fertilizer concerns, and speculative buying as grains lagged the broader commodity rally [2].
- **Fund positioning:** Corn still carries the heaviest speculative support. CFTC data for the week ended March 17 showed funds net-bought **32,000 corn contracts**, lifting the net long to **231,000**, the largest since February 2023; combined corn/soy/SRW positioning was **414,000 contracts net long** [2]. Another market source put corn fund length at roughly **230,000** after successive weeks of covering and warned that a crude-oil reversal could pull money back out of corn [1, 3]. In soybeans, funds were net sellers of **16,000** contracts in the CFTC data, while separate commentary said managers still hold a sizable soy complex length, including the largest soy oil net long since November 2016 [2, 1].

- **Exports and trade flow:** Weekly U.S. export inspections were **66.9 million bushels of corn**, **40.5 million bushels of soybeans**, and **16.8 million bushels of wheat** [4]. Marketing-year pace is still **306 million bushels ahead** of USDA's corn target, **55 million bushels ahead** on wheat, and **116 million bushels behind** on soybeans [5, 6, 7]. Private exporters also reported **102,000 MT of corn** and **161,120 MT of soybeans** sold to Mexico for 2025/26 delivery [8].
- **China-linked demand remains mixed:** A delayed Trump-Xi meeting weighed on soybeans early in the week [1]. At the same time, other commentary said China has kept rhetoric positive on buying U.S. commodities and that talks may expand beyond soybeans to feed grains such as corn, wheat, sorghum, ethanol, and DDGs [1, 3]. The harder data remain weaker: soybean commitments to China were cited as down **49%** year over year and actual exports down **61%**, while Brazil was still described as cheaper even excluding tariffs [9]. China-bound inspections for the week were **0.0 million bushels of corn**, **24.4 of soybeans**, **2.5 of wheat**, and **7.2 of sorghum** [10].
- **United States - cattle:** The cattle market held up despite a superficially bearish Cattle on Feed report. March 1 on-feed numbers were **11.51 million head**, placements were **1.61 million head** and **4% above** both last year and expectations, while marketings were **1.52 million head**, down **7%** year over year [2, 1]. Traders repeatedly noted that placements were being measured against a weak prior-year base affected by border closure and weather disruption [2, 3]. Cash trade ticked higher, slaughter stayed tight at **508,000 head** because of the JBS Greeley disruption, and feedlots were described as regaining leverage [3].

2) Innovation Spotlight

North Dakota regenerative system with measurable soil and cost outcomes

Gabe Brown described a transition from conventional tillage and synthetic-heavy production to no-till beginning in **1994**, after repeated hail and drought losses from **1995-1998** forced a rethink of inputs and system design [11]. His framework centers on minimal disturbance, soil armor, diversity, living roots, and animal integration [11]. On his own operation, water infiltration reportedly improved from **0.5 inch per hour** to **2 inches in 25 seconds**, and he cited a **13-inch** rain event after which the field was drivable the next day [11]. He also described a multi-enterprise model with about **1,000 head of beef cattle** plus sheep, hogs, laying hens, and broilers, using daily moves and **12-15 months** of rest between grazings on some paddocks [11].

Brown also shared training examples tied to the same principles: one producer cut input costs by **$180,000 in one year**, and another reduced fertilizer spending from more than **$1.5 million** to **$127,000** in six years [11].

Organic row-crop economics plus compliance software

A Colorado organic system built around a **corn-pinto bean-wheat** rotation reported **203 bushels/acre** organic corn on **1,000 acres** of the corn phase [12]. The same source described a **$10/bushel** organic corn market and framed **210-bushel** organic corn as roughly **$2,100/acre gross revenue** [12]. The tradeoff is operating intensity: organic management was described as requiring **nine field passes** versus **three to four** in a conventional program [12].

The administrative bottleneck is also material. The source estimated about **20 hours/week** of paperwork on a **2,000-acre** farm, plus mandatory annual audits and mass-balance reconciliation [12]. Quick Organics said digitizing the Organic System Plan can reduce prep time from **four days to four hours**, and a common Organic System Plan is expected to be publicly announced in **May 2026** [12].

Western Kansas water use without yield loss

In western Kansas, producers reportedly cut **Ogallala aquifer pumping by 20%** without reducing yields by combining local irrigation limits, no-till practices, crop choices, and soil-moisture monitoring, while keeping farms profitable [13].

3) Regional Developments

- **Brazil - southeast Mato Grosso soy harvest losses:** Excess rain is now translating directly into yield and margin damage. One farm reported **850 mm** of rain from **Jan. 30 to Mar. 15**, severely waterlogged silt soils, and **40-50%** damaged soybeans [14]. To salvage roughly **90 hectares**, the producer bought an adapted rice-field harvester for about **R$500,000** [14]. Expected yield fell from a normal **65-70 bags/ha** to a little above **50 bags/ha**, against costs around **61 bags/ha**, implying an estimated loss of about **11 bags/ha** [14]. The operation had already pre-sold about **80%** of production via contracts [14].
- **Brazil - logistics are compounding the weather hit:** On the same Mato Grosso case, a **160 km** haul to Campo Verde was said to take **5.5 hours** because of road conditions [14]. Diesel moved from **R$6.15** to **R$8.08/liter**, with peak harvest consumption of **2,000-3,000 liters/day** and reports of rationing [14].
- **Brazil - South weather risk:** Rio Grande do Sul and Santa Catarina were under red alert for heavy rain, hail, winds above **100 km/h**, flooding, and possible tornadoes or microbursts, with producers advised to avoid fieldwork during the event [15]. After the system passes, Paraná is expected to face another **7-8 days** of drier weather, worsening crop water deficits [16].
- **Brazil - poultry exposure to the Middle East:** The Middle East takes about **30%** of Brazil's chicken meat exports, so blockage or dis-

ruption around Hormuz raises insurance, freight, and fuel costs, cutting exporter margins and potentially pressuring producer prices if product is forced back into the domestic market [17].

- **China/Brazil soybean flow:** China eased inspection requirements on Brazilian soy shipments after weed detections and said it would not impose zero tolerance for weeds, a move that one market source said was consistent with Brazil's large crop and China's import needs [2].
- **United States - Plains wheat:** Kansas wheat conditions were described as having deteriorated through winter, with timely spring rains now important for the crop [3]. Separate commentary also flagged hot, dry weather risk in the southern Plains [18].

4) Best Practices

Grains and crop inputs

- **Biological nitrogen products:** One testing-based commentary said biological N products do provide nitrogen, but only if the microbes survive application. The main cautions were to avoid copper, certain zinc products, and especially chlorine in the carrier, and to test soil nitrogen and organic matter first so biological N is only used where the crop actually needs it [19].
- **Enlist One application discipline:** Brownfield cited **near-zero volatility**, more than **96% volatility reduction** versus 2,4-D 240 ester, and more than **90% drift reduction** when Enlist One is used correctly [20]. The implementation checklist was specific: start with a clean tank and clean water, choose nozzles that deliver the correct droplet size, run **10-20 GPA** depending on the tank mix, use the labeled rate of **2 pints/acre**, spray in **3-10 mph** wind, and avoid air inversions [20].

Livestock

- **Pre-lambing ewe management:** A Minnesota sheep-health webinar recommended targeting ewe body condition scores of **3-4**, measured by palpation rather than visual scoring [21]. Nutrition should step up in the last **4-6 weeks** of gestation, when lambs gain about **75%** of birth weight and the udder fully develops [21]. The same source recommended loose iodized mineral year-round rather than blocks, a clostridial C/D vaccination **4-6 weeks pre-lambing**, and pre-lamb shearing to improve cleanliness, lamb access to the teat, and ewe awareness of newborn lambs [21].
- **Lamb survival basics:** The same presentation stressed rapid colostrum intake, stripping wax plugs from teats if needed, and dipping navels with iodine or a similar antiseptic to reduce early infections [21].
- **Foot rot control:** The recommended program included vaccinating twice **six weeks apart**, then every **six months** in wet conditions, using a **10%**

zinc sulfate footbath, and keeping sheep on dry ground for **three days** after treatment [21].

- **Barn climate management:** For Brazilian poultry and swine barns, weather analysts warned that long warm stretches interrupted by short cold pulses can reduce immunity, making thermal comfort management a recurring operational issue this autumn [22].

Soil management

- **Five-principle soil framework:** Brown's implementation model is practical and sequential: reduce mechanical and chemical disturbance, keep residue on the surface, increase diversity, maintain living roots as long as possible, and integrate animals back into the system [11].

5) Input Markets

- **Diesel and fertilizer are the main input story:** In the U.S., the national average diesel price moved above **$5/gallon** for only the second time on record, linked to the Strait of Hormuz disruption, with explicit warnings about impacts on agriculture, trucking, and freight costs [2, 1]. In Brazil, corn producers were warned that urea and other nitrogen fertilizers are up **30-40%**, directly affecting top-dress economics [23, 24].
- **Availability matters as much as price:** Brazilian sources described diesel at **R$8/liter** in Brasília and said some retailers were receiving less than half their normal deliveries [25]. Brazil produces about **3.7 million barrels/day** of crude but refines only around **2 million barrels/day**, leaving agribusiness exposed to imported diesel and higher freight costs [26, 27].
- **Fertilizer policy bottlenecks in Brazil remain unresolved:** Brazil's National Fertilizer Policy created Confert to support domestic production, biofertilizers, hybrid technologies, and industrial residues [28]. But one legal analysis said the policy is not self-implementing and that hybrid mineral-biological fertilizers and some industrial residues still fall into a registration gray zone because Confert cannot directly update MAPA rules [28].
- **Natural gas remains a fertilizer watch-point:** One market note argued that natgas-based fertilizers are fundamental for spring grain pricing. It also said fertilizer indices have correlated with European natural gas at about **0.72** over **2015-2025** and about **0.83** since **2020**, while the recent gas price rise has been more pronounced in Europe than in U.S. Henry Hub [29].
- **Policy response is building:** In Brazil, farm groups asked to raise the biodiesel blend to **17%** from **15%** to reduce dependence on imported refined fuel [24, 23]. In the U.S., lawmakers are seeking more fertilizer price transparency amid rising costs [30].

6) Forward Outlook

- **March 31 is the next major market checkpoint:** USDA Prospective Plantings and quarterly stocks are due then, and one analyst specifically flagged the corn stocks report as a release that has missed trade expectations by multiple hundreds of millions of bushels in prior years [3].
- **Biofuel policy is next in line:** RFS blending mandates are expected between Friday and next Tuesday, with the market using EPA's prior **5.61 billion gallon** biodiesel proposal as the reference point for soy oil and soybean demand [3].
- **Acreage signals are split:** One source put corn intentions near **95 million acres** as of March 1 and said market economics still favor corn over soybeans, though fertilizer uncertainty is a major swing factor [3]. Another source said market talk has centered on a possible **5 million acre** shift from corn to beans [31]. Soybean acres were also expected to rise from last year's low base [3].
- **Livestock planners have immediate report risk:** Thursday's Hogs and Pigs report is the key near-term event for inventory, pig crop, and farrowing revisions [3]. In cattle, attention shifts back to cash trade, slaughter pace, and whether grilling-season demand keeps supporting prices [31].
- **Weather remains a planning variable, not a backdrop:** Kansas wheat still needs timely rain [3]. In Mato Grosso and parts of the Matopiba, producers were advised to use the drier **March 26-30** window to advance fieldwork before heavier rain returns [32]. In southern Brazil, cyclone risk is immediate, but moisture deficits in Paraná remain unresolved after the storm passes [16].
- **The broader spring setup:** If energy markets retreat, some corn fund length may unwind; if diesel, natural gas, and fertilizer stay elevated, input-cost pressure is likely to keep supporting grain risk premiums into spring [3, 29].

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