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Federal Crop Insurance Backgrounder

KEY TAKEAWAY

American farmers have solid risk management structures in place via the U.S. Farm Bill, a piece of legislation that is renewed every five years, charting out considerable sums of funding and guidance for consumer nutrition payments, crop insurance, and conservation efforts. The federal crop insurance program covers an extensive list of crop commodities, however certain key woody agroforestry crops like chestnuts and hazelnuts remain off the list and unprotected. This presents problems for stakeholders wishing to implement these shrubs and trees into their agroforestry operations. In this report, we do a deep dive on today's various crop insurance programs, along with potential avenues for covering agroforestry-related crops…both from existing back door options and the development of new crop insurance products. The good news? There are clear pathways for covering chestnuts and hazelnuts today and tomorrow.

KEY POINTS

Federal Crop Insurance Program. The U.S. government provides a wide network of support to farming enterprises and their rural communities, mainly as a result of policies within the U.S. Farm Bill. The Farm Bill itself is a comprehensive piece of legislation, passed by the government every five years, governing American policies related to food, farming, and general rural interests. The majority of Farm Bill funding typically goes towards the cost of the Supplemental Nutrition Assistance Program (SNAP), or what is typically referred to as food stamps. Sizeable amounts of funding also go towards the federal crop insurance program, related Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs, and conservation funding.

The Risk Management Agency (RMA) within the USDA administers the federal crop insurance program, which is provided to American farmers and ranchers to assist with declines in yield or price over a crop's designated production period. Federal crop insurance is available for roughly 120 crops today, including many specialty crops. Crop insurance itself is provided via the Federal Crop Insurance Corporation (FCIC), a wholly owned government corporation managed by RMA. In addition to federal crop insurance, farmers also have access to "commodity programs" like Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs, administered by the Farm Service Agency (FSA). Both ARC and PLC can be used alone or in conjunction with federal crop insurance options (although farmers cannot participate in both ARC and PLC at the same time). These commodity programs only cover a core list of commodities, to include wheat, oats, barley, corn, grain sorghum, rice, soybeans, sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe and sesame seed, seed cotton, dry peas, lentils, small chickpeas, large chickpeas, and peanuts.

Existing Options for Agroforestry. While a wide list of specialty crops is currently covered by the federal crop insurance program, a number of related woody agroforestry crops are not presently covered by the USDA, chief among them: chestnuts and hazelnuts. That said, there are available product offerings on the market today that could potentially serve as coverage options for stakeholders of these agroforestry crops. The two main options are 1) Whole Farm Revenue Protection (WFRP) and 2) the Noninsured Crop Disaster Assistance Program (NAP). Although these options are indeed available, they are viewed negatively by producers.

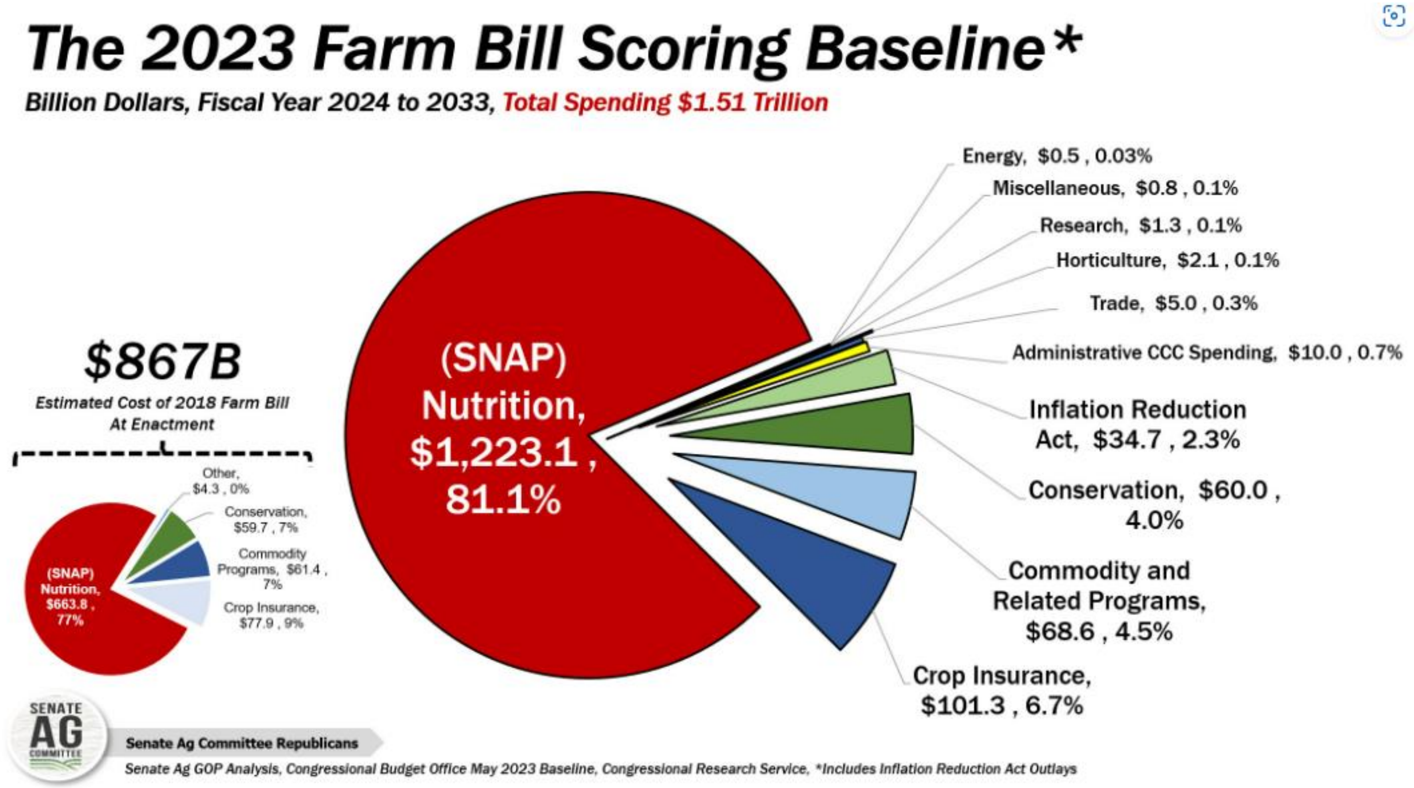
Process for New Products. Stakeholders can work with RMA to get new crops/commodities added to the federal crop insurance program, as detailed in Section 508(h) of the Federal Crop Insurance Act. Although the process is lengthy (multiple years), there is a clear and prescriptive pathway for enacting a new crop insurance product with the government. We anticipate that industry stakeholders will work to get new chestnut and hazelnut crop insurance products approved by RMA, and we can attest that Agroforestry Partners itself has already begun an individual process to advance chestnut data capture and reporting in pursuit of this goal, with a targeted first-year coverage option of 2026 for chestnuts.

FEDERAL CROP INSURANCE PROGRAM

Wide Network of Farm Support in the U.S.

The U.S. government provides a wide network of support to farming enterprises and their rural communities, mainly as a result of policies within the U.S. Farm Bill. The Farm Bill itself is a comprehensive piece of legislation, passed by the government every five years, governing American policies related to food, farming, and general rural interests. The last bill was passed in late 2018, which makes 2023 another "Farm Bill year." Congress is presently negotiating this year's bill, with expectations that total funding could ultimately amount to over $1 trillion for the first time in history. As **Figure 1** shows, the majority of Farm Bill funding typically goes towards the cost of the Supplemental Nutrition Assistance Program (SNAP), or what is typically referred to as food stamps. Sizeable amounts of funding also go towards the federal crop insurance program, related Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs (a.k.a. Commodity and Related Programs), and conservation funding.

Figure 1: U.S. Farm Bill Funding



Source: United States Senate Committee on Agriculture, Nutrition, and Forestry

There are three main government agencies within the United States Department of Agriculture (USDA) that are tasked with dispersing funds and knowledge related to crop insurance, commodity programs, and conservation efforts: the Farm Service Agency (FSA), the Natural Resources Conservation Service (NRCS), and the Risk Management Agency (RMA). These agencies are largely organized around the type of work and support that they offer, stretching across four areas: 1) funding/finance, 2) risk management, 3) conservation, and 4) disaster recovery. As shown in **Exhibit A** at the end of this report, FSA is entirely responsible for broad funding/finance applications like Farm Operating Loans, while also being entirely responsible for disaster recovery applications like the Livestock Indemnity Program (LIP). FSA also does some key work within the risk management and conservation silos, managing ARC and PLC in the risk management area and governing the Conservation Reserve Program (CRP) in the conservation area. By and large, NRCS administers most programs inside the conservation area. RMA is solely responsible for the federal crop insurance program, which is housed inside the risk management silo.

Federal Crop Insurance

RMA administers the federal crop insurance program, which is provided to American farmers and ranchers to assist with declines in yield or price over a crop's (includes animal and animal products) designated production period. Federal crop insurance is available for roughly 120 crops today, as found here. Crop insurance itself is provided via the Federal Crop Insurance Corporation (FCIC), a wholly owned government corporation managed by RMA. Insurance is first sold and serviced through private insurance companies, with a portion of the premium + administrative/operating expenses borne by the private company subsequently subsidized by the federal government. On average, farmers and ranchers pay about 40% of their total premiums themselves. FCIC also reinsures private insurance companies by absorbing some of the losses of the program when indemnities exceed total premiums.

Federal crop insurance provides four main individual farm-level, multi-peril plans/options. These are termed as common crop, or Combo, products for their ability to provide both yield and price-based policies that protect against adverse weather conditions, failure of irrigation water supply, natural fire, disease and insects, and wildlife damage. The four individual farm plans are:

1) Yield Protection (YP)
    a. Offers a production guarantee based on individual Actual Production History (APH) yield, which is an average of up to ten years of actual and/or assigned yields. In the event of a yield loss, the gross indemnity is calculated as the bushels per acre loss (production guarantee minus actual yields) multiplied by the projected price.
2) Revenue Protection (RP)
    a. Offers protection against loss of revenue due to a production loss, change in price, or a combination of both. For the price element, RMA uses the higher of a projected price for the commodity or the actual harvest price in considering a gross indemnity payment.
3) Revenue Protection with Harvest Price Exclusion (RPHPE)
    a. Similar to RP but carries a lower premium because the revenue guarantee is determined by the projected price only and excludes the possibility of benefiting from higher harvest prices.
4) Catastrophic Coverage (CAT)
    a. Offered under the YP plan at 50% of the APH yield and 55% of the projected price. Premiums are fully subsidized, however administrative fees for each crop are significantly higher than other plans.

Federal crop insurance plans offer an array of coverage levels for yield and/or revenue ranging from 50% to 85% in increments of 5%. Farmers and ranchers can go beyond 85% insurance coverage using additional plans on offer from RMA. The Supplemental Coverage Option (SCO) and Enhanced Coverage Option (ECO) can both be used in these situations and are referred to as shallow loss coverage plans, based on their added protection for producers that ensures even small losses will be covered.

ARC and PLC Programs

FSA administers the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs (Commodity and Related Programs), which can be used alone or in conjunction with federal crop insurance options. Farmers cannot participate in both ARC and PLC at the same time. Additionally, these programs only cover a fraction of the crops covered by federal crop insurance. Covered commodities for ARC/PLC include wheat, oats, barley, corn, grain sorghum, rice, soybeans, sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe and sesame seed, seed cotton, dry peas, lentils, small chickpeas, large chickpeas, and peanuts.

ARC's objective is to provide assistance when income is transitioning from a multi-year period of high income to a period of low income. Producers have the option of choosing to have their payments based on county revenue (ARC-CO) or having their payments based on individual farm revenue (ARC-IC).

The ARC-CO program provides income support tied to historical base acres - not current production - of covered commodities. ARC-CO payments are issued when the actual county crop revenue of a covered commodity is less than the ARC-CO guarantee for the covered commodity. ARC-IC program payments are issued when the actual individual crop revenue for all covered commodities planted on the ARC-IC farm is less than the ARC-IC guarantee for those covered commodities. ARC-IC uses producer's certified yields, rather than county level yields. Broadly, producers in ARC are ineligible for SCO on their planted acres.

PLC's objective is to provide assistance for low prices experienced during a crop's marketing year. PLC program payments are issued when the effective price of a covered commodity is less than the respective reference price for that commodity. The effective price equals the higher of the market year average (MYA) price or the national average loan rate for the covered commodity. Producers in PLC have the option of purchasing SCO.

EXISTING OPTIONS FOR AGROFORESTRY CROPS

Limited Choice for Insuring Woody Agroforestry Crops

While a wide list of specialty crops is currently covered by the federal crop insurance program, a number of related woody agroforestry crops are not presently covered by the USDA, chief among them: chestnuts and hazelnuts. That said, there are available product offerings on the market today that could potentially serve as coverage options for stakeholders of these agroforestry crops.

The Whole Farm Revenue Protection (WFRP) plan is an option available today under the Revenue Protection (RP) plan. RMA notes that WFRP is a safety net to all commodities – including specialty crops as defined by the Agricultural Marketing Service (AMS) – made under one insurance policy, available in every state and county in the U.S. Due to the fact that chestnuts and hazelnuts are included on the AMS specialty crop list, both of them would be available for insurance coverage under a WFRP plan. Our math suggests that the premium for a mixed corn/chestnut WFRP policy would be competitive with the combined premiums for a single corn RP policy and a single (hypothetical) chestnut RP policy (based on existing apple tree policies as a proxy), however we would caution that WFRP plans are generally disliked by the farming community due to long lead times for indemnity payments (~2 years) and additional data capture requirements relative to individual farm policies.

The Noninsured Crop Disaster Assistance Program (NAP) is another existing avenue for agroforestry crop insurance protection. NAP is administered by FSA and provides assistance to producers of non-insurable crops. That said, NAP is quite expensive, with our math suggesting a premium that is ~3x that of a standard RP corn policy, ~2x that of a corn/chestnut WFRP policy, and over 4x that of a potential standalone chestnut RP policy (based on existing apple tree policies as a proxy).

PROCESS FOR NEW PRODUCTS

Clear Pathway for Approving New Insurance Products

Stakeholders can work with RMA to get new crops/commodities added to the federal crop insurance program, as detailed in Section 508(h) of the Federal Crop Insurance Act. Although the process is lengthy (multiple years), there is a clear and prescriptive pathway for enacting a new crop insurance product with the government.

To start, a sizable amount of data is required for multiple fields over successive years; ideally, this would take the form of 10 or more locations across six or more years. Data needs can be bucketed out into three areas:

1) Production Data – locations, acreage, planting density, yield, etc.
2) Market Data – historical sales records, volume, pricing, trends, etc.
3) Qualitative Data – verification approach, valuation approach, expert commentary, etc.

After the research and data collection process, a concept submission is developed by summarizing the intended contract design along with available data and evidence that a viable insurance product can be created. This work includes a marketability assessment reviewed by two crop insurance companies. Once constructed, the concept submission can be made to the FCIC at four different points across the year, followed by FCIC and outside expert review. If approved by the FCIC, stakeholders can move into the full development process.

A full submission requires additional data collection in support of constructing an actuarial document and contract provisions. Once completed, these documents are reviewed by two crop insurance companies and submitted to the FCIC, whereby they will be sent out for review by five outside experts. These experts will offer suggestions for improvement while then recommending approval or disapproval to the FCIC. The FCIC will also take testimony from interested parties before considering final approval.

Together, this process can take 2-3 years before first-year coverage can come into place for the following crop year.

Exhibit A: USDA Agency Responsibilities by Designated Focus Area

1) Funding

Name	Agency	Detail
Biomass Crop Assistance Program (BCAP)	FSA	Provides incentives that help farmers grow bioenergy feedstocks and connect with qualified biomass conversion facilities
Down Payment Loans	FSA	Provides a low-interest government loan to help beginning, minority, veteran, and women farmers purchase a farm or ranch.
Farm Operating Loans	FSA	Help producers pay for normal operating expenses. Direct (up to $400,000) and guaranteed (up to $1.75 million) operating loans are available.
Farm Ownership Loans	FSA	Help producers become owner-operators of family farms. Direct (up to $600,000) and guaranteed (up to $1.75 million) ownership loans are available.
Farm Storage Facility Loans	FSA	Provide low-interest loans to build, purchase, or upgrade facilities and equipment used to store, handle, or transport eligible commodities.
Marketing Assistance Loans	FSA	Provide interim financing at harvest time for producers to meet cash flow needs.
Microloans	FSA	Provide farm loans to underserved farmers serving local markets. Farm Operating and Farm Ownership Loans of up to $50,000 each are available.
Organic Certification Cost Share Assistance	FSA	Provides up to 75 percent of organic certification costs for producers, not to exceed $750 per certification scope.
Youth Loans	FSA	Provide operating loans of up to $5,000 to youth ages 10 to 20 to finance income-producing, agricultural projects.

2) Managing Risk

Name	Agency	Detail
Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) Programs	FSA	Protect farm revenue from changes in market conditions. Provides a safety net to farmers and ranchers.
Conservation Stewardship Program Grassland Conservation Initiative	NRCS	Provides financial assistance to conserve grasslands through a single opportunity to enroll in a 5-year contract.
Dairy Margin Coverage Program (DMC)	FSA	Replaces the Margin Protection Program for Dairy. Offers protection to dairy producers.
Federal Crop Insurance	RMA	Offers hundreds of different insurance products.
Noninsured Crop Disaster Assistance Program (NAP)	FSA	Provides financial assistance to producers of certain eligible crops for which catastrophic risk protection plan of insurance is not available.

3) Conservation

Name	Agency	Detail
Agricultural Conservation Easement Program (ACEP)	NRCS	Helps landowners protect, restore, and enhance wetlands, grasslands, and working farms and ranches through conservation easements.
Agricultural Management Assistance Program (AMA)	NRCS	Helps agricultural producers manage financial risk through diversification, marketing, or natural resource conservation practices.
Conservation Innovation Grants (CIG)	NRCS	Awards competitive grants that drive innovation and develop the tools, technologies, and strategies for next-generation conservation efforts on working lands.
Conservation Reserve Program (CRP)	FSA	Protects soil, water quality, and habitat by removing highly erodible or environmentally sensitive land from agricultural production through long-term rental agreements.
CRP - Transition Incentives Program	FSA	Encourages landowners to sell or lease long term to beginning, socially disadvantaged, and veteran farmers and ranchers willing to implement sustainable practices.
Conservation Stewardship Program (CSP)	NRCS	Helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities.
Environmental Quality Incentives Program (EQIP)	NRCS	Provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits.
Healthy Forest Reserve Program (HFRP)	NRCS	Helps landowners restore, enhance, and protect forestland resources on private lands through easements and financial assistance.
Regional Conservation Partnership Program (RCPP)	NRCS	Promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners.
Voluntary Public Access and Habitat Incentive Program (VPA-HIP)	NRCS	Provides State and Tribal governments with funding or incentives to expand or improve habitat in existing public access programs.

4) Disaster Recovery

Name	Agency	Detail
Emergency Assistance for Livestock, Honeybees, and Farm-raised Fish Program (ELAP)	FSA	Provides assistance to eligible owners of livestock, and producers of honeybees and farm-raised fish for losses.
Emergency Conservation Program (ECP)	FSA	Provides funding and technical assistance for farmers and ranchers to restore farmland damaged by natural disasters/drought.
Emergency Forest Restoration Program (EFRP)	FSA	Provides funding to restore privately owned forests damaged by natural disasters.
Emergency Loans	FSA	Provide loans to help producers recover from production and physical losses due to drought, flooding, other natural disasters, or quarantine.
Livestock Forage Disaster Program (LFP)	FSA	Provides compensation to eligible livestock producers that have suffered grazing losses due to drought or fire.
Livestock Indemnity Program (LIP)	FSA	Provides benefits to livestock owners for livestock deaths in excess of normal mortality caused by adverse weather or by attacks by animals reintroduced into the wild.
Tree Assistance Program (TAP)	FSA	Provides financial cost-share assistance to qualifying orchardists and nursery tree growers.

Source: USDA

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