



Recommendations for a USDA Climate Strategy

Docket No. USDA-2021-003-0001

April 29<sup>th</sup>, 2021

We offer these comments from the Regenerative Agriculture Alliance on behalf of a diversity of small-scale farmers, and representative organizations, mostly from a perspective of Black, Latino, Indigenous, and Asian American background. The RAA is a non-profit tax-exempt organization based out of Northfield, MN with partners across the United States, Canada, Mexico, and Guatemala. The RAA's geographical focus is concentrated in the Midwestern states with a further operational focus along the bordering region of MN, IA, and WI. The RAA is focused on building physical and organizational capacity for farmers transitioning from conventional row-crop agriculture to new and innovative forms of working with the land that protect water systems, soil and biodiversity while reducing farm inputs and improving quality and value of farm output. The RAA is part of a complex ecosystem that collectively engage tens of thousands of organizations, farmers, policy makers, sustainable agriculture funders, food businesses, and investors across the country.

## SECTION 1: CLIMATE SMART AGRICULTURE AND FORESTRY QUESTIONS

- A. How should USDA utilize programs, funding and financing capacities, and other authorities to encourage the voluntary adoption of climate-smart agriculture and forestry practices on working farms, ranches, and forest lands?
  1. How can USDA leverage existing policies and programs to encourage voluntary adoption of agriculture that sequester carbon, reduce greenhouse gas emissions, and ensure resiliency to climate change?

Recommendation: Shift the USDA priorities towards making climate resilient agriculture practices, such as agroforestry, and silvopasture systems the priority for policy and investments while reducing support for conventional crops vulnerable to climate change which also contribute to climate change themselves, erode soils, reduce, or eliminate the soil's capacity to hold water and nutrients, and subsequently reduce diversity and create vulnerabilities.

To address market-driven opportunities for voluntary adoption of agriculture practices that can deliver lower levels or even reverse greenhouse gas emissions and build climate resilience on farms and across the supply chain, the USDA must increase investments in proven and historically successful hybrid models. Models that incorporate agroforestry, alley cropping

systems for annual crops, grazing systems for ruminants, and promising and underdeveloped perennial cropping systems.

Key climate resilient and carbon-neutral or carbon-positive agriculture and agroforestry practices and options ready for investments and scaling up:

- Alley cropping of annual shallow-root cropping systems (i.e. corn, soybeans, small grains)
- Winter cover crops such that can deliver early season crops such as winter wheat and *camelina sativa*.
- Provide significant financial incentives for farmers rebuilding ancient and world-wide known practices for grazing medium and large-size livestock in silvopasture systems which increases soil organic matter, water absorption, retention, and retrieval. This in turn increases photosynthesis, and in turn deliver higher biomass volumes critical to turning carbon at a higher level through the soil, pastures, animals and overstory canopies of multiple species that further capture atmospheric nitrogen, extra carbon, and store it deeper in the soil for later retrieval or permanent sequestration.
- Support the emergence and scaling up of Midwest-based perennial cropping industries such as hazelnuts, chestnuts, and elderberries. Nut crops have the capacity to deliver higher returns for farmers, but when produced and traded as commodities, the by-products can substitute and significantly improve the quality of animal feed rations through higher protein content, nutrient density and variety and healthy fatty acids such as Omega-3.
- Robust investments in plant genetics, nurseries, value added processing facilities, and markets for perennial crops can still support the growing of alley-cropped annual crops while exponentially increasing carbon sequestration, farm diversity, farm specialization, diversification, and climate resilience through multiple streamlined farm outputs.

2) What new strategies should USDA explore to encourage voluntary adoption of climate-smart agriculture and forestry practices?

Recommendation: Focus strategic planning not on how to continue to prop-up and support what is not working, but on finding strategies to shift from what is not working into mapping out and engaging with the hundreds of alternatives to managing the landscape with a priority on the following sectors.

Animal production. Shift focus from confinement animal production to initiatives led by existing ranchers and farmers, and immigrant and minority farmers-led multiple alternatives for raising animals under practices that deliver high-quality products, significant competitive advantages in the marketplace, but also climate resilience and forest restoration such as:

- Scalable model for regenerative Poultry systems that return poultry to its original forest-based habitat while improving animal welfare, permanent soil cover, high-level of

carbon sequestration (more than 2.5 MT/acre), and rural economic competitiveness which is the foundation of encouraging the voluntary adoption of these systems.

- Eliminate subsidies for factory farms and allow them to demonstrate that they are viable on their own merits in the same way that alternative systems have been forced to survive and grow on their own merits. Focusing especially minority Black, Indigenous, and People of Color farming communities who have operated and succeeded while doing so under conditions that support conventional confinement animal production creating an artificial and unfair competitive advantage in the marketplace for this sector. It is time for the conventional system to prove that it can operate on its own merits without government subsidies and for alternative systems to be given a chance to scale-up.
- Enact fair labor standards; Invest in monitoring and assurance that workers are paid at least \$15 per hour, verification that working conditions meet OSHA standards, to include breaks, access to space, structuring of assembly lines that do not cause repetitive injuries, medical leave, vacation, and other foundational fair labor and working conditions. Moreover 60% of the labor force in the meat packers and farm sector are believed to be immigrant populations. Over 70% of that population is believed to come from agricultural backgrounds. By changing the working conditions and compensation, and allowing for freedom to explore alternatives, coupled with institutional support these populations can repopulate the landscape and introduce a multitude of farming innovations. Rather than being limited to providing cheap labor, engaging these populations would result in a potential diversification of the landscape and with it, the emergence of a new generation of climate resilient farmers that are ready to voluntarily adapt climate resilient agriculture systems.

### **Carbon Markets**

- Carbon is the foundation of all life on earth. Carbon as an element is like the currency of life, and to fulfill its purpose in the planet as the foundation of climate stability most of the carbon in the original ecosystem needs to circulate in the form of living systems.
- The foundation of carbon management is ecosystems restoration so that this element can again be part of the living systems of the earth and the geo-evolutionary processes that created the conditions for the diversity of life to exist, including our own as human beings.
- From this foundational set of indigenous principles, carbon cannot be measured in terms of its accumulation and sequestration, but rather in terms of the volume of it circulating within an ecosystem at a given point in time.
- Knowing that carbon needs to circulate for it to fulfil its life-giving function, we recommend that:
  - o The USDA establishes key verifiers of carbon circulation not sequestration
  - o The USDA establishes payment system for ecosystems restoration measured according to ecosystems-level outcomes such as water absorption, storage, and

retrieval capacity of the soil, number of native species restored to the land, soil organic matter content (which is equivalent to the water management system capacity of the soil and the capacity of the landscape to cycle more carbon through photosynthesis and soil micro-biota), and other critical indicators that carbon volume in circulation per acre has been optimized.

- The USDA establishes such payment systems for ecosystem services on a per-acre basis and gives priority to the systems that reach optimization faster, namely small-scale farmers where more intensive soil building techniques and independence from toxic inputs is achieved faster and with a larger engagement of the public, farmers, consumers, and advocates.

Identify, Quantify, Qualify and Set-up Strategies and Systems to Support Efficient, Proven, and Climate Resilient Ancestral Indigenous Agriculture Systems

Recommendation:

- That the USDA systematically validate current expressions, and further map the small-scale and mostly minority-led innovations in animal husbandry and other areas of agriculture.
- That the USDA systemically re-structures internal programming to provide incentives for systems that currently live and thrive outside of the main USDA focus, through this effort the USDA will learn of new strategic opportunities to make investments that uplift those innovations, support their growth into scalable options regionally and nationally, and validate ways of managing the land which deliver higher nutrient-density food products, and new industrial development opportunities.
- That the USDA supports efforts to aggregate of small-scale farming systems that can be organized and standardized into large-scale producer pools and regions of small-scale producers. The resulting outcome will deliver new industry sectors and innovations that are by design climate resilient and enhance the cycling of carbon while delivering higher value to consumers, to farmers, and rural communities.

B) How can partners and stakeholders, including State, local and Tribal governments and the private sector, work with USDA in advancing climate- smart agricultural and forestry practices?

Much of tribal lands are farmed conventionally, while Native American reservations import almost 100% of their food. In the Pine Ridge Reservation alone, with over 2.8 million acres within the reservation, they import 99% of their food, while this food is responsible for massive diet-related disease and severe loss of productivity and local capacity. Meanwhile, the land has been stripped of its vegetation, ecosystems have been decimated, and the wealth continues to be extracted from this land. Unfortunately, this is the case across the country.

## Recommendations:

- That the USDA works closer with the Department of the Interior, the Bureau of Land Management, state departments of Agriculture, and Tribal Governments to revise and update the rules and regulations that govern access to land by Indigenous families living within the reservation who have vocation and desire to engage in indigenous/ancestral/regenerative agriculture.
- That these revisions of rules that define access to land result in the release of burdens of proof that today keep many reservation residents from accessing their own land.
- That the USDA and related partners and stakeholders focus on developing new rules that establishes a priority for any tribal member within a reservation who desires to practice a validated form of regenerative climate-resilient, indigenous agriculture system be given unrestricted access to their own land.
- That the partners and stakeholders unify policies that remove supports and increase the accountability on tribal councils so that they make land access within the reservations a priority for their own residents and that renting land to outsiders for conventional farming becomes a last resort, and that all income from continued land rentals be set aside for investments in farming opportunities for native people within the reservation.
- That the USDA through its many programs and partners and stakeholders increase the investment in farm design, farm deployment, value added infrastructure, market access, branding, and transition support for native people to re-deploy their lands according to their own vision and ways.
- That the USDA set forth an initiative to map and systematically consider all BIPOC-led initiatives for land management, agricultural production, and innovations. That it engages the multiple layers of partners and stakeholders in prioritizing these innovations and supporting the populations within these communities that can scale them up, and that it deliberated evaluates all budget lines and carries out executive orders to align investments for land acquisition, production infrastructure, value-added infrastructure, and markets development within these sectors.
- That the USDA establishes a BIPOC commission headed by representatives from all BIPOC communities engaged in agriculture and that these comments be taken up by such commission to further develop them into policy proposals and system-level change recommendations under a permanent structure within the USDA.

C) How can USDA help support emerging markets for carbon and greenhouse gases where agriculture and forestry can supply carbon benefits?

Approached from a different angle, agriculture and forestry are simply processes and management systems that focus on the management of transformation of energy, where the circulating currency and value is the carbon in the ecosphere. Technically speaking, carbon is simply the foundation of efficient agriculture and forestry and the more efficient the systems as

implement, the less greenhouse gases that will be released and the more benefits will be achieved.

From this perspective, the best support the USDA can provide is not within the so called “emerging carbon markets”, but within the “emerging demand for food with nutritional integrity”. As it happens, the nutritional integrity of the food we produce is the result of how well the agriculture and forestry sector manage the carbon cycle. The best market for carbon is the market for regeneratively produced foods. This is where the highest value for the carbon in agriculture and forestry resides. As it happens the collective carbon benefits that can be delivered by thinking in this manner, are also the optimal benefits that can be delivered for the conventional concept that defines the concept of the “emerging carbon markets” as understood by Wall Street.

By following this logic, and investing in systems engineered according to this logic, the USDA can help US farmers and carbon market institutions outcompete the world by achieving both; a) the most market value for the restoration of the carbon cycle to its original geo-evolutionary function, and b) deliver the most carbon benefits that can then be marketed through the conventional concept of carbon markets as understood by Wall Street.

To the extent that the above is the operational goal, the USDA can review and modify regulatory controls, policies, investment priorities, and other operational aspects of the multiple dependencies, and instruct the multiple layers of USDA partners and stakeholders on a new theory of competitiveness that delivers profits on both ends, restores the carbon cycles, and delivers a climate resilient way of managing the agriculture and forestry landscape.

D) What data, tools, and research are needed for USDA to effectively carry out climate-smart agriculture and forestry strategies?

Conventional tools primarily measure data points within linear processes that may deliver outcomes that may be incrementally better such as no-till or conservation agriculture. However, the outcome is still an agriculture system centered on monocultures and toxic inputs. The key to data, the tools that are used, and the research needed to effectively carry out climate-smart agriculture and forestry strategies must focus on outcomes, where those outcomes generate the framework for the process of data collection, which tools are best for the data needed, and at what points in the process is the data most important. Baselineing is critical, but if we measure the amount of carbon in a tilled soil planted with corn on corn for decades, then we do the same in a no-till system, and we measure the same element in a perennial system, the data collected on carbon alone, tells none of the story of how smart the agriculture or forestry strategy that deliver that carbon is. It is critical that the USDA starts looking at the system-level outcomes as a foundation of its internal strategic processes.

In short, today, the USDA and the world of agriculture and forestry operate from a framework that seeks to validate existing systems. The question of whether we should or should not plant corn and soybeans is rarely if ever asked in strategy development at the highest levels of

government, on conventional farms, or within the agriculture industrial complex that delivers inputs, machinery, technology, and extension, support systems, and contracting of farm products. Without carefully evaluating the framework, the idea of climate-smart agriculture and forestry strategies is reduced to ways of tweaking things within existing processes to deliver the same outcome. A truly climate-smart agriculture and forestry strategy starts from the end we have in mind, which is the restoration of carbon and other critical elements to the living systems of the ecosphere, and their removal from the atmosphere and water systems where they have become a threat to the planet. To achieve that, we must engage in ecosystems restoration and work our way backwards to define the research needed, the data that can validate the outcomes, and the selection of the appropriate toolbox. From this perspective, we recommend the following:

- Aim the current USDA research, environmental data collection, financial modeling and other critical modeling and tracking tools at defining the final outcomes that determine when an ecosystem has regained its capacity to restore the cycle of critical elements such as carbon and nitrogen, and critical agroforestry infrastructure such as health of the soil web, geo-evolutionarily-defined hydrology, water quality, aquifers recharging, and other system-level outcomes that determine if the outcomes are “intelligent” or “smart,” so that the patterns and processes that deliver such outcomes can be defined according to those outcomes, and the tools and research priorities re-defined according to these outcomes.
- Adapt tools, research priorities, and kind of data collection to the ecological blueprints of regions. Every regional ecology in the world evolved according to the specific presence and support of biological, chemical, and physical processes. Those processes are directly influenced by geological formations and phenomena, weather patterns, ocean currents, jet streams, and a multitude of factors which at the end, define the way each ecosystem responds to disruption and how their disruption impacts the larger weather patterns. This in turn impacts the biological, chemical and physical processes on which these regions have depended to support life for tens of thousands of years in some parts of the US. To the extent that the USDA has a multitude of regionally positioned infrastructure, and to the extent that an outcomes-based methodology is implemented, it has the capacity of establishing priorities for data collection, research prioritization, and adaptation of tools, and the regionalized expertise to carry out these kinds of adaptations to achieve the desired climate-smart agriculture and forestry strategies.
- Interlink climate-smart agriculture and forestry data collection, tools and research priorities with the economic value, and quantity and quality of physical output per acre of farm operations that function at a higher level of engagement of ancestral ecosystems, and as a result, at a higher level of energy transformation efficiency, which when baselined from a data-collection perspective can deliver an innumerable set of

options to further climate-smart research and development.

E) How can USDA encourage the voluntary adoption of climate-smart agricultural and forestry practices in an efficient way, where the benefits accrue to producers?

The accrual of benefits to producers in agriculture and forestry is directly the result of how the wealth created through the supply chain is distributed across the multiple layers, and multiple players and components of said supply chain. A system that focuses in the extraction of value from the ecology (extraction of the value of the soil for agriculture and the extraction of the value of wood in the forestry sector) treats producers simply as ponds or peons in such process of extraction of value. From that perspective, any benefit that is generated is not at the producer level, but rather higher up in the supply chain. It is no coincidence that the current system burdens the producers with the riskier part of the agriculture and forestry sector which is the land-based production. A product leaves the farm or the forest at its lowest value point, at which point the ownership and control is removed from the producer which is left with almost all of the risk of production and the lowest possible value.

To change these conditions, encourage voluntary adoption of climate-smart agriculture and forestry practices, and streamline the process by which producers accrue more benefits we recommend the following:

- Reclassify production systems by affinity sectors within each of the agriculture and forestry sub-sectors. Such affinity sectors or classifications can be derived from the diverse expressions, coalitions, and self-defined groups of producers across the country. Organizations such as the Midwest Organic and Sustainable Education Services are home to a multitude of these affinity sectors. Such affinity sectors that already practice climate-smart agriculture, for whom the market has already validated their systems, and who can significantly scale-up if properly supported include but are not limited to: Regenerative poultry, pastured pork, grass fed beef, perennial agriculture groups, etc.
- Use the above reclassification to systemically evaluate and establish the baseline value chain from the farm to table. Starting with the market value of products, document the distribution of wealth across the value chain.
- Develop and implement incentives programs, by shifting subsidies from extractive systems, to support a more equal distribution of the market value of agriculture and forestry products so that producers are compensated more fairly and equally based on the value they deliver to the supply chain.

As a result of policies, incentives, new rules, and adaption of paradigms shifts of this nature, producers will voluntarily adapt and scale-up climate-smart agriculture and forestry. As long as producers are extracted upon and left with the burden of the risks and the assets needed to generate the agriculture and forest-based outputs that create value beyond the farm or the forest the value will not accrue and the voluntarily parade to adopt climate-smart agricultural and forestry practices will simply not materialize.

## SECTION 2: BIOFUELS, WOOD AND OTHER BIOPRODUCTS, AND RENEWABLE ENERGY QUESTIONS

A. USDA utilize programs, funding and financing capacities, and other authorities to encourage greater use of biofuels for transportation, sustainable bioproducts (including wood products), and renewable energy?

Both forestry and agriculture are sectors engaged in the management and oversight of energy sequestering, its management, use, and eventual release into the atmosphere and engagement of the continuum of energy cycles management which define the concept of renewable energy.

Both sectors are engaged in the sequestering and management of naturally occurring energy, captured through photosynthesis, and transformed through animal disturbance, soil biology, and climate into a multitude of harvestable forms of energy such as biofuels, wood, and other forms of energy.

Forestry engages a multitude of forms of energy sequestration, concentrated on photosynthesis, soil biology, and a combination of species that can best do the energy transformation job. The result of this processes is what we call biofuels, wood, bioproducts, or renewable energy. In the case of solar and wind forms of energy generation, the process does not include biology or photosynthesis, but it is still centered on sequestering or harvesting existing energy that flows throughout the ecosphere either as photons or as the force of the wind. Either way, these are both sectors that focus on the management of either harvested, or sequestered energy. Furthermore, some of this energy can be stored for a long-time through biofuels and their by-products, while others such as wind and solar must be used as they are produced or within a short window of time.

Viewed from this perspective, we recommend that the USDA does the following:

- Orient funding and financing capacity towards increasing the forest cover and photosynthetic capacity to sequester and harvest solar energy. Ideas for achieving large-scale goals in this area include:

- Requiring all livestock producers to couple their manure production with landscape-based management of the manure based on formulas that ensure soil health and avoid the oversaturation of chemical elements in the manure that may be detrimental to the permanent forest cover of the area being utilized as a “natural composting system”.
- Requiring grain producers to utilize manure from livestock producers to fertilize annual crops and incentivize such producers to plant and support bands of perennial cropping systems (trees) and implement alley-cropping systems and increase the production of wood-based biofuels within their landscape while reducing soil erosion, increasing carbon cycling into the soil and increasing the total biomass output per acre.
- Establish incentives for farmers to protect all waterways by planting tree-based buffers around sufficiently wide (no less than 100 feet on each side) to support wildlife corridors and to connect existing forested areas, across the landscape.
- Re-design incentives and rules for harvesting permanent cover within waterways so that farmers who protect these ecosystems may be rewarded, while those who destroy them may face penalties sufficient to incentivize them to leave these ecosystems alone.
- Encourage the active management of all private forests and incentivize regenerative forestry.

B. How can incorporating climate- smart agriculture and forestry into biofuel and bioproducts feedstock production systems support rural economies and green jobs?

Climate smart agriculture and forestry that encourages voluntary participation and adoption at larger scale results more from how the system itself is owned and governed than by prescribing a multitude of practices and then paying people to adopt them through incentives. Incentives are critical, but only when they are used to ignite the adoption of practices at community-wide or regional scale. Based on these considerations, we recommend the following ideas for how the USDA can incorporate can act in relation to the question posed above.

- Deploy a new and larger scale family of financial incentives for agroforestry-based systems for raising poultry, pork, beef, sheep, goats, and other livestock to exponentially increase the production of biofuels and overall value to producers from agricultural land. As a result of this practices and incentives, stacked enterprise systems emerge which generate a full ecosystem of employment opportunities from farm-based jobs, to forestry management, meat processing, branding, marketing, financing, transportation, refrigeration, and a multitude of symbiotically connected economic exchanges which capture value, generate wealth in a system designed to spread it, and contribute to significant economic development.
- Establish a national program for community-based forestry management, a system where local communities collectively owned (through their government units) the rights

to their surrounding forests within a county, and within a township, where those forests are then managed for the benefit of local water systems, and to support local employment and the generation of benefits that stay in the community, in communities where the forest is sufficiently large to support a full range of forest management business services, communities would buy shares in the management businesses and collectively own and govern them, while those larger community systems would provide the same services for smaller neighboring communities, systems of this kind have significantly contributed to protecting, enhancing, and sustaining forest-based ecosystems in other countries and hold tremendous promise in the United States.

C) How can USDA support adoption and production of other renewable energy technologies in rural America, such as renewable natural gas from livestock, biomass power, solar, and wind?

On this question, we at the Regenerative Agriculture Alliance have a fundamental problem with the concepts presented. For regenerative agriculture is centered in the stewardship of energy transformation, from non-edible forms, into edible forms that we can harvest, feed our communities, market, and profit from. When dealing with energy management in livestock production, the foundational principle as defined by the laws of thermodynamics, is that a system designed to efficiently transform energy it generates no surplus of it that needs to be managed through artificial means. The balancing of the energy transformation results from measuring and quantifying such energy transfer from the land in the form of grain through the grain processing into feeds, and from feed into manure. For the most part, livestock produced under a climate-smart design produces no manure by-products, as the energy contained in the manure is already accounted for in the next cycle of production outdoors. Where there is accumulation of manure inside a barn, which is only necessary for raising poultry that needs night-time shelters, that manure (energy) is then transferred into grain production and other agriculture and forestry systems where it continues its cycles. As a result, there is no need for the artificial management of this energy through natural livestock gas production. From this viewpoint, we express the following ideas/recommendations:

- Support the further deployment of livestock farms that use solar production systems as shade and protection for the grazing of animals, sheep, goats, chickens and turkey are species that can be raised at large scale under the shade and physical protection of solar energy generating systems with minor height and spacing modifications. This strategy allows farmers to set-aside land for solar energy production without forgoing livestock production while also reducing the cost of maintenance of the solar installations.
- By supporting forest-based or agroforestry livestock production systems, rural communities can make more efficient use of the vast rural landscape and generate more biomass capable of supporting the throughput needed to supply biomass-based electrical and heat generation.
- In the vast landscape Nebraska, Iowa, and Minnesota where millions of acres are now covered with windmills, the land under that infrastructure is still desolate and cover

with corn and soybeans. The RAA is scaling up regenerative poultry systems centered in raising poultry outdoors. One critical aspect of raising poultry outdoors is the control of aerial predators. Without interfering at all with the wind generation technology, the millions of acres already covered with windmills, can be relatively easily populated with the RAA's poultry system. The windmills in turn help control aerial predators that thrive in calm and undisturbed space, and farmers can generate higher incomes from those same areas supporting an alternative industry and generating a value added out of the wind-based energy infrastructure. The RAA has estimated that it will take merely 2.5 million acres of land to supply the country with 5% of broilers and eggs from a regenerative design based on outdoor production. Because the system incorporates an understory canopy of hazelnuts and elderberries for the mentioned states, the system would add to the wind generation, permanent cover for the soil, an agricultural crop for the farmer, plus the high value tree-range® poultry from exactly the same space. The USDA could help by validating, and incentivizing farmers to adopt innovations of this kind and help beautify the landscape despite the presence of these structures and gain more value from the land.

### 3) Addressing Catastrophic Wildfire Questions

A. How should the USDA utilize programs, funding and financing capacities, and other authorities to decrease wildfire risk fueled by climate change?

- Return management of wildfire prone areas to local authorities with a mandate and financial incentives to create management systems based on livestock production and building incentives and controls for local farmers to graze the land at scale under carefully calculated grazing systems that support the ecology and restore the balance of fuels that when they catch on fire do not represent the level of risk that unmanaged systems do.
- Where Native communities have ancestral connections over territories, return the management of all areas prone to wildfires to indigenous tribes with the mandate and financial incentives to restore ancestral management systems and to engage tribal communities as the key contractors in the management of these areas not only for the purpose of avoiding catastrophic fire events, but for the purpose of regenerating the ecology of those regions and contributing to solving the climate crisis, turning these areas from liabilities to assets in the fight against climate change.

For questions B, C, and D of this section, the RAA recommends engaging in outcome-based strategies to define research, data collection, and tools to be used. This means measuring outcomes through indicators that show a decolonization of the landscape management systems and allowing tribal communities to define processes, infrastructure, data collection, and investments needed to achieve the desired outcomes of transforming the threat of wildfires into advantages in the effort to slow down and mitigate climate change. Data and research to validate what is being done (or not being done) today is simply a road to nowhere.

This strategy would then flow through all stakeholders and partners at all levels who jointly are responsible for the management of this landscape.

#### 4. Environmental Justice and Disadvantaged Communities Questions

From the perspective of the RAA the issue of environmental justice and disadvantaged communities requires clarifications. First, there are structures in the dominant system which were created to generate discrimination and support racism, which when implemented through the multiple levels of the USDA system result in the unjust treatment of sectors of the population engaged in agriculture. The injustice itself, does not exist in isolation, whether is social or environmental, the issue of injustice is an issue of structures and systems, and how they are designed, how policies are written and by whom, whose input is considered valid and incorporated and whose is not. The environment itself is neither just or unjust, so in the context of the USDA, it is the way the institution is structured and governed that generates the conditions of injustice. As for disadvantaged communities, every community has critical advantages, in the context of the USDA the question should be asked “how is the USDA responsible for the advantage that some communities have gained at the expense of the rest who end up at a disadvantaged.” Again, the issue then goes back to the structures of power, governance, policies, and how investments are made, incentives distributed. These are questions for the USDA to revise internally first, and then ask the questions from the broader community, but still with the intention of having itself internally evaluated. Within that framework, the RAA is pleased to contribute the following comments/input.

A. How can USDA ensure that programs, funding and financing capacities, and other authorities used to advance climate-smart agriculture and forestry practices are available to all landowners, producers, and communities?

- By re-mapping the landscape of landowners, producers, and communities and ensuring that funding, financing capacities, and other authorities are proportionately distributed across these communities so long as they are engaged in some form of climate-smart agriculture and forestry practices.

- By ensuring that programs, funding and financial capacities and other authorities are actively seeking and incorporating input in relation to climate-smart agriculture practices within these communities and ensuring that that input defines the internal allocation of resources and programs' focus.

B. How can USDA provide technical assistance, outreach, and other assistance necessary to ensure that all producers, landowners, and communities can participate in USDA programs, funding, and other authorities related to climate-smart agriculture and forestry practices?

- Based on the RAA experience working with a diversity of farmers primarily from BIPOC communities, the USDA programming is complicated and difficult to access without high-level administrative capacity, know-how, and navigating skills that are simply not present in most farmer communities or individual farmers. To this end, the USDA must increase the diversity of officers in-charge of program delivery and navigation and re-train such officers so that they become service access facilitators and directly assist farmers on such process as any business would assist priced customers where the performance is measured by the success rate in accessing the USDA resources in relationship to the total population in a region from each customer sector (minorities, farmers, value added operations, farming operations, etc.)
- Establish an ample definition for climate-smart agriculture and prioritize farmers who tend their own land above all other forms of land ownership and control.

C. How can USDA ensure that programs, funding and financing capabilities, and other authorities related to climate-smart agriculture and forestry practices are implemented equitably?

- Remove artificial barriers in the qualification processes for USDA financing. For example, in order to access an FSA loan, the USDA requires two major items that present an artificial barrier with no specific merit or indicator that is necessary.

A) The requirement that the applicant present a rejection letter from a traditional lender. This requirement establishes no other parameters, for example interest rate. A traditional lender may still offer credit at high interest rates but not a rejection that can be used by the farmer to access more affordable FSA financing. This results in an indirect, but just as punishing discrimination resulting in the cost of financing for the farmer increasing sometimes by many percentage points. This issue not only presents a barrier to entry, in most cases the farmer may simply choose not to proceed with their farming dream. In other cases, they go ahead and borrow conventionally at a much higher rate once disqualified by the FSA office, resulting in a higher cost of financing and a severe price disadvantage in comparison to those who have inherited land or have larger down-payments or family support to avoid indebtedness and achieve a lower cost of production and farm business stability.

B) The requirement for three years of schedule F filings with the IRS or sufficient proof of proficiency in farming and years of experience. The issue with this requirement is that immigrant, low-income farmers, and those trained outside of the conventional educational system have no way to prove proficiency. And without three years of actual farming there the schedule F filing is not available either. On another front, many immigrant farmers come with extensive experience and sometimes agronomical degrees from their countries of origin. There

is no specific way or pathway for these acquired capacity to be validated through the FSA lending process.

Between these two policies alone, the USDA's FSA office has ensured that most farmers within disadvantaged communities are effectively excluded from USDA financing to start, grow, or operate their farms.

- Discrimination at the USDA offices, much has been written and evidenced collected about this issue. But if evaluating the two items above, an office can effectively use either or both items to legitimately disqualify an individual from access to USDA services and financing, yet in rural communities, any minority knows that racism and discrimination are prevalent and hide behind apparently benign rules to legitimize denial of access to minority farmers and ranchers. This is severe blind spot that can be corrected by reviewing the two rules above.
- Do not invalidate, ignore, or toss aside a non-conventional way of farming just because it is not known to the USDA or because it is not yet studied or validated by conventional universities or the scientific establishment. With a clear set of expectations for scalability, ecological, social, and economic outcomes, validate and recognize BIPOC-led innovations and incorporate the BIPOC-led nature of climate-smart agriculture and forestry practices as the sole qualifier for accessing USDA financing, funding, programs and other authorities.
- Populate the USDA programs and officers with a diversity of population representative of the diversity of the farming communities across the landscape.
- Initiate a set of full scholarships for minority students with a vocation and interest in agriculture to pursue higher education and prepare for a career within the USDA, so that when in the process of diversification of the USDA's staff across the board, where a sector of the population may not have professionals qualified to serve within the USDA, the USDA takes it upon itself to develop such capacity.