MEMORANDUM

SUBJECT: Specialty Crop Committee's (SCC) Recommendations for the Hemp Research Roadmap (August 2023)

FROM: Michele Simmons, Program Support Specialist NAREEE Advisory Board

TO: The Office of the Chief Scientist

DATE: September 7, 2023

RECOMMENDATION:

We suggest that you consider building out your introduction to include more context, such as hemp's global and U.S. current and projected crop production statistics, its history and uses, and competitive landscape. (We assume the research needs addressed in your roadmap apply only to American-grown hemp.) For those who may be unaware or unfamiliar with hemp as a specialty crop, as many members of this committee are—and many audiences representing funding sources may be—this additional information could help strengthen the case for prospective research funding.

RECOMMENDATION:

We suggest adding a hyperlink to your reference to the <u>National Hemp Industry Needs</u> <u>Workshop</u>, as shown here, for additional historical context for this document.

RECOMMENDATION:

We suggest changing the phrase, "Needs to Parallel Research," to something either more descriptive or more germane to the broader research enterprise. A simpler phrase, such as "parallel private/public research," could be used. Indeed, the section of your document labeled "Potential Roles for Public and Private Sectors" seems to better describe the idea. Or, as an alternative, the phrase "extension, education and economics" would cover the activities it appears you include in this category, such as economics and markets, testing and compliance. (We would argue that sustainable agricultural production could be an area for research as well as extension/outreach.)

RECOMMENDATION:

We suggest that you may consider bolstering the conclusion of your roadmap with the addition of visionary statements or perhaps a color-coded (e.g., red for critical) graphic depiction of the inter-relationship of the need areas and relevance of public/private partnerships, and/or the different markets and the needs in each of the areas. A committee member suggested the MindMap app as a tool that could perhaps produce such a dynamic flowchart.

RECOMMENDATION:

The following are line-item comments committee members provided in the Need Area overviews (Note that you might consider standardizing these as either Need Areas or Needs Areas):

- Need Area 1: Breeding and Genetics: Foundational Research: We wondered if the reference to data-sharing referred to the global community of hemp breeders and geneticists (not just U.S.) and if there are resources planned or in place for enabling and promoting the sharing of genetic assets.
- Need Area 1: Breeding and Genetics: Trait-Based Goals for Specific End-Uses: Is the hemp consortium going to aim at double- or triple-use varieties? Or aiming at developing specific varieties for particular end-uses? If the latter, it is suggested that different programs will need to be set up in order to be efficient and achieve high genetic gains.
- Need Area 1: Breeding and Genetics: Potential Roles for Public and Private Sectors: To underscore hemp's value as a commodity, it may be beneficial to reference breeding efforts by major seed companies, if applicable. Such efforts or interest could be viewed as an indicator of the crop's economic potential.
- Need Area 2: Best Practices for Growing: Sustainable Production Practices: Labor seems to be missing from the list of topics to address and/or balance as hemp seeks to develop sustainability practices. A good deal of research is aimed at addressing labor shortages and promoting labor efficiency among other specialty crops. We would presume labor would be a top concern for hemp, as well. Moreover, equitable treatment for employees and meaningful community stewardship are common tenets of sustainability programs; we would recommend these be addressed, as well.
- Need Area 3: Production for End-uses: Referencing the hemp industry's need to measure metabolites and other properties of cannabinoids, one committee member wrote, "To me, this is a thorny issue, which can make the crop less advantageous than others. The fact that we will always have to be testing to make sure those compounds are not present will put a premium on to the cost/price of hemp."