



Urban Agriculture Listening Sessions

During May 2020, the Western Center for Metropolitan Extension and Research (WCMER), in conjunction with the National Urban Extension Leaders (NUEL) and several urban Farm Bureau county organizations, responded to a request for stakeholder input from the National Institute of Food and Agriculture (NIFA) about the Urban, Indoor and other Emerging Agricultural Production Research, Education and Extension Initiative. Our goal was to solicit, collect and organize responses from a broad group of stakeholders to the two questions posed by NIFA:

1. Considering agricultural production through marketing; which phase has the greatest and most urgent research, education and extension (REE) needs in developing urban and indoor agriculture?
2. Of the eight priorities, which priority has the greatest and most urgent REE need in developing urban and indoor agriculture that is not being adequately addressed in other Federal REE programs?

Data were collected through two formats: (a) four on-line listening sessions conducted on May 28 and May 29 and (b) an on-line survey which was open from May 8 through June 7 and marketed through several email lists. Both formats polled participants and allowed participants to provide input around the REE needs and the Congressional priorities related to NIFA's two questions.

This approach resulted in three primary, and nested, data sets:

- **Registration Data:** These data are derived from individuals who registered for one of the four listening sessions but did *not* attend any listening session (n=87). During registration, individuals selected the agricultural phase they considered most important, from the list enumerated in NIFA's first question. This selection during registration can serve as an indication of a priority area for registrants who did not attend. Registrants (n=240) were from 43 U.S. states, territories and districts, while actual attendees (n=153) were from 38 U.S. states, territories and districts.
- **Listening Session Data:** During the on-line listening sessions, we conducted a poll for each of NIFA's questions. Participants then were divided into facilitated breakout rooms, based on the agricultural phase they selected at registration, to explore specific needs for urban and indoor agriculture around REE. Breakout room comments were first coded by the seven phases enumerated in NIFA's question 1. Comments were then coded by NIFA's eight Congressional language priorities represented in question 2. It is important to note that one comment may appear in multiple categories.

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WCMER DIRECTOR

Brad Gaolach
Washington State Univ.

- On-line Survey Data: Participants taking the on-line survey were asked to rank order the options for each NIFA's questions. They were also asked to indicate if they had, or planned to, attend an on-line listening session. With this additional data, we are able to exclude results of those whom also attended an on-line listening session from the on-line survey, thereby reducing the duplication of data.

In addition to the qualitative and quantitative data collected in response to each of NIFA's two questions, we also collected some basic demographic data. All data sets include the city, county, and state or territory of participants while the survey data also includes data related to gender, age, and race and ethnicity.

When possible, we provided data at the national and regional level, using the four geographically-based regions recognized by the Extension Committee on Organization and Policy (ECOP):

- North Central Region (NC), comprised of the states of: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, and WI.
- Northeast Region (NE), comprised of the states of: CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT, and WV and the District of Columbia.
- South Region (S), comprised of the states and territories of: AL, AR, FL, GA, KY, LA, MS, NC, OK, PR, SC, TN, TX, VA, and VI.
- West Region (W), comprised of the states and territories of: AK, AS, AZ, CA, CO, FM, GU, HI, ID, MP, MT, NM, NV, OR, UT, WA, and WY.

Results

Key Findings

1. Across all data sets, agricultural production was the agricultural phase with the greatest and most urgent REE needs – ranked as the top priority by 51.9% of the respondents. Markets was the phase with the next most urgent REE needs with 21.4% of respondents indicating it as their top priority phase.
2. Within the narrative responses during the on-line listening sessions, the same pattern emerged with agricultural production and markets receiving the most responses related to specific REE priorities. Several subthemes emerged under production: soils, water, climate, integrated pest management (IPM), indoor agriculture, labor, and contaminants.
3. Of the Congressional language priorities identified in question 2, item (c) *“identifying and promoting the horticultural, social, and economic factors that contribute to successful urban, indoor, and other emerging agricultural production”* was identified by 51.8% of respondents across all data sets as having the greatest and most urgent REE needs for urban, indoor, and emerging agriculture. Item (d) *“analyzing the means by which new agricultural sites are determined, including an evaluation of soil quality, condition of a building, or local community needs”* was the second (13.4%) most identified Congressional priority in need of REE.

Q1: Considering agricultural production through marketing; which phase has the greatest and most urgent REE needs in developing urban and indoor agriculture?

Quantitative Prioritization

Registration Data: These data represent individuals who registered for the on-line listening sessions but did not attend a session; therefore, the breakout session they wanted to participate in is a surrogate for their top priority area. 35 states, territories, and districts are represented in these data.

Region	Agricultural Production	Harvesting	Transportation	Aggregation	Packaging	Distribution	Markets	Grand Total
<i>NC</i>	9	2	1	2	1	1	1	17
<i>NE</i>	8	0	0	0	1	2	6	17
<i>S</i>	16	1	2	1	1	1	5	27
<i>W</i>	13	0	1	1	0	2	9	26
Grand Total	46	3	4	4	3	6	21	87

Listening Session Data: The poll taken during the listening sessions did not track individuals; therefore, these data represent all participants from the 38 states, territories, and districts who participated.

Agricultural Production	Harvesting	Transportation	Aggregation	Packaging	Distribution	Markets	Grand Total
48	4	3	10	0	15	22	102

On-line Survey Data: These data represent those who completed the on-line survey and indicated they had not, nor were planning to, attend an on-line listening session.

Region	Agricultural Production	Harvesting	Transportation	Aggregation	Packaging	Distribution	Markets	Grand Total
<i>NC</i>	3	0	0	1	0	0	1	4
<i>NE</i>	2	0	0	0	0	0	0	2
<i>S</i>	4	1	0	0	0	0	0	5
<i>W</i>	2	0	0	0	0	0	0	2
<i>Other</i>	2	0	1	0	0	0	1	4
Grand Total	13	1	1	1	0	0	1	17

Aggregating across all data sets N (%):

Agricultural Production	Harvesting	Transportation	Aggregation	Packaging	Distribution	Markets	Grand Total
107 (51.9%)	8(3.9)	8 (3.9)	15 (7.3)	3 (1.4)	21 (10.2)	44 (21.4)	206

Narrative Responses.

During the on-line listening sessions, participants were divided into smaller facilitated breakout rooms to explore the specific needs for urban and indoor agriculture are around REE. In total, 888 comments (includes duplicates) were collected with a breakdown as follows:

- 299 collected about research (R)
- 290 collected about education (Ed)
- 299 collected about extension (Ex)

A summary of the comments, divided by research, education, and extension follows.

<i>Region</i>	Agricultural Production	Harvesting	Transportation	Aggregation	Packaging	Distribution	Markets	Grand Total
<i>R</i>	140	4	4	11	3	11	22	299
<i>Ed</i>	94	4	1	5	5	8	21	290
<i>Ex</i>	147	5	7	19	6	11	52	299
<i>Grand Total</i>	381	13	12	35	14	30	95	888

Of the 299 comments collected about research, 140 related to agricultural production. Within those 140 comments several sub-themes emerged: 30 comments relating to soils, 16 to water, 34 to climate or sustainability issues, 17 to IPM, 17 to indoor agriculture, 9 to contamination, and 4 to labor issues.

Of the 290 comments collected about education, 94 related to agricultural production. Within those 94 comments several sub-themes emerged: 7 comments relating to soils; 14 to sustainability, resilience or climate issues; 6 to IPM, and 47 to needed adjustments in production techniques or specialty production techniques to meet the needs of urban, indoor and emerging agriculture.

Of the 299 comments related to extension, 147 related to agricultural production. Within those 147 comments several sub-themes emerged: 13 comments relating to soils; 20 relate to adjustments needed in scale or size to meet the needs of urban, indoor and emerging agriculture; 10 to water; 20 to climate or sustainability issues; 73 to economic education, cost of technology, economic sustainability models; 7 to IPM; 7 to indoor agriculture; and 11 to contamination.

Q2: Of the eight priorities, which priority has the greatest and most urgent REE need in developing urban and indoor agriculture that is not being adequately addressed in other Federal REE programs?

Quantitative Prioritization

Listening Session Data: The poll conducted during the listening sessions did not track individuals; therefore, these data represent all participants from the 38 states who participated.

On-line Survey Data: Those who completed the on-line survey and indicated they had not, nor were planning to, attend an on-line listening session.

Priority	Listening Session	On-line Survey				Total N (%)
		NC	NE	S	W	
<i>(a) Assessing and developing strategies to remediate contaminated sites;</i>	3	0	0	1	0	4 (3.6%)
<i>(b) determining and developing the best production management and integrated pest management practices;</i>	7	0	1	0	0	8 (7.1)
<i>(c) identifying and promoting the horticultural, social, and economic factors that contribute to successful urban, indoor, and other emerging agricultural production;</i>	51	0	1	4	2	58 (51.8)
<i>(d) analyzing the means by which new agricultural sites are determined, including an evaluation of soil quality, condition of a building, or local community needs;</i>	13	2	0	0	0	15 (13.4)
<i>(e) exploring new technologies that minimize energy, lighting systems, water, and other inputs for increased food production;</i>	10	1	0	0	0	11 (9.8)
<i>(f) examining building material efficiencies and structural upgrades for the purpose of optimizing growth of agricultural products;</i>	5	0	0	0	0	5 (4.5)
<i>(g) developing new crop varieties and agricultural products to connect to new markets; or</i>	6	0	0	0	0	6 (5.4)
<i>(h) examining the impacts of crop exposure to urban elements on environmental quality and food safety.</i>	4	1	0	0	0	5 (4.5)
<i>Total</i>	99	4	2	5	2	112

Narrative Responses.

The narrative data from the on-line, small group breakout sessions were also coded and analyzed by NIFA's eight Congressional language priorities (below) by looking for key terms or phrases in the Congressional language and coding comments by these terms/phrases. It is important to note that one comment may appear in multiple categories. No attempt was made to group similar comments.

Of the 299 comments related to research, the following themes and sub-themes emerged.

- Social Impacts (31)
 - Cultural Impacts (11)
- Economic Impacts (41)
 - Labor (4)
- Land Use, Regulations, Ordinances and other Policy issues (35)
 - Sites (8)
- Government (9)
- Nutrition and Food Safety (21)
- Consumers (16)
- General Comments about Research (16)

Of the 290 comments related to education, the following themes and sub-themes emerged.

- Social Impacts (34)
 - Cultural Impacts (10)
- Economic Impacts (44)
 - Specific small business training topics (26)
- Food safety training (4)
- Access due to social, racial or economic issues (11)
- Land Use, Regulations, Ordinances and other Policy issues (22)
- Educational opportunities with local government and decision makers (9)
- Networking, Collaboration and Support Networks (12)
- Nutritional Value, Food Preservation and Food Safety (22)
- Consumers (12)
- General Comments about Education (3)
- Educational topics needed and Potential Educational Methodologies/Delivery Methods (41)
- K-12 Schools and Youth (65)
- Higher Education (50)
- Workforce Training or Development (23)

Of the 299 comments related to extension, the following themes and sub-themes emerged.

- Social Impacts (36)
 - Cultural Impacts (8)
- Economic Impacts (76)
- Access due to social, racial or economic issues (35)
- Land Use, Regulations, Ordinances and Other Policy Issues (39)
 - Sites (6)
- Networking, Collaboration and Support Networks (26)
- Extension Staff, Program or Operations (27)
- Nutritional Value, Food Preservation and Food Safety (12)
- Consumers (12)
- General Comments about Extension (12)

Demographics of Respondents

Participation by regions

<i>Region</i>	Listening Session (registrants)		On-line Survey	Total
	Attended	Did Not Attend		
<i>NC</i>	39	17	4	60
<i>NE</i>	28	13	2	43
<i>S</i>	34	23	5	62
<i>W</i>	52	23	2	77
Grand Total	153	76	13	242

Gender (on-line survey data only)

Region	Attended Listening Session			Planned to Attend Listening Session			On-line Survey Only		
	Female	Male	Chose not to provide	Female	Male	Chose not to provide	Female	Male	Chose not to provide
NC	7	2	0	5	2	1	2	2	0
NE	1	2	2	0	0	0	1	0	1
S	5	3	1	4	1	0	2	3	5
W	5	3	0	5	4	2	1	1	0
Grand Total	18	10	3	14	7	3	6	6	1

Age

These data are from the on-line survey only and include all options (did attend, planned to attend, or did not attend an on-line listening session).

Region	21 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 or older	Chose not to provide	Grand Total
NC	2	6	3	2	4	1	3	21
NE			1	1	1		4	7
S	1	2	7	1	5	2	1	19
W	1	3	5	4	4	3	1	21
Grand Total	4	11	16	8	14	6	9	68

Race and Ethnicity

These data are from the on-line survey only and include all options (did attended, planned to attend, or did not attend on-line listening sessions).

Region	Hispanic, Latino, or Spanish origin	Black / African American	American Indian or Alaska Native	Caucasian / White	Asian	Pacific Islander	Chose not to provide	Total
NC	0	2	1	15	1	0	3	22
NE	0	0	0	4	0	0	3	7
S	0	0	0	18	0	0	1	19
W	2	2	1	16	2	0	3	26
Grand Total	2	4	2	53	3	0	10	74