

114TH CONGRESS
2D SESSION

S. _____

To promote urban agricultural production, and for other purposes.

IN THE SENATE OF THE UNITED STATES

_____ introduced the following bill; which was read twice
and referred to the Committee on _____

A BILL

To promote urban agricultural production, and for other
purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Urban Agriculture Act of 2016”.

6 (b) TABLE OF CONTENTS.—The table of contents for
7 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Definition of Secretary.
- Sec. 3. Congressional findings and declaration of purposes.

TITLE I—OUTREACH, COORDINATION, AND NEW POLICY

Sec. 101. Office of Urban Agriculture.

TITLE II—FARM ENTERPRISE DEVELOPMENT

- Sec. 201. Farm business planning program.
- Sec. 202. Urban agriculture cooperatives.
- Sec. 203. Risk management.
- Sec. 204. Expanded loans for farm equipment.

TITLE III—A HEALTHIER ENVIRONMENT

- Sec. 301. Soil assessment.
- Sec. 302. Innovative urban conservation.
- Sec. 303. Pilot projects to increase community compost.
- Sec. 304. Healthy food healthy environment pilot program.

TITLE IV—RESEARCH, INNOVATION, AND TECHNOLOGY

- Sec. 401. Urban food production and market data initiatives.
- Sec. 402. Data collection on urban agriculture.
- Sec. 403. Urban agriculture research, education, and extension initiative.

1 **SEC. 2. DEFINITION OF SECRETARY.**

2 In this Act, the term “Secretary” means the Sec-
3 retary of Agriculture.

4 **SEC. 3. CONGRESSIONAL FINDINGS AND DECLARATION OF** 5 **PURPOSES.**

6 (a) FINDINGS.—Congress finds that—

7 (1) agricultural producers are developing inno-
8 vative agricultural production methods and using
9 traditional production methods in innovative loca-
10 tions;

11 (2) those urban agricultural practices have the
12 potential—

13 (A) to create jobs and workforce develop-
14 ment;

15 (B) to increase food production;

16 (C) to support local food infrastructure;

17 (D) to create new regional markets for ag-
18 ricultural producers, consumers, and businesses;

1 (E) to revitalize abandoned or underused
2 property and buildings;

3 (F) to enhance urban green space and im-
4 prove air quality;

5 (G) to provide pollinator habitat;

6 (H) to encourage community engagement;

7 (I) to mitigate stormwater runoff;

8 (J) to create energy efficiencies;

9 (K) to strengthen relationships between
10 urban consumers and agriculture; and

11 (L) to inspire a new generation of agricul-
12 tural producers in the United States; and

13 (3) to realize those benefits, the Secretary
14 should comprehensively incorporate urban agri-
15 culture into the vision of the Department of Agri-
16 culture to provide economic opportunity through in-
17 novation, promoting agricultural production that—

18 (A) better nourishes the people of the
19 United States; and

20 (B) preserves the natural resources of the
21 United States.

22 (b) PURPOSES.—The purposes of this Act are—

23 (1) to establish a consistent and coordinated
24 approach within the Department of Agriculture to
25 support urban agriculture;

1 (2) to articulate a broadly inclusive description
2 of urban agriculture that includes—

3 (A) new and innovative agricultural prac-
4 tices;

5 (B) traditional agricultural practices in
6 nontraditional locations; and

7 (C) for-profit and nonprofit production
8 methods; and

9 (3) to promote activities including urban farm-
10 ing, edible gardens, green walls, rooftop agriculture,
11 and indoor vertical farms.

12 **TITLE I—OUTREACH, COORDINA-**
13 **TION, AND NEW POLICY**

14 **SEC. 101. OFFICE OF URBAN AGRICULTURE.**

15 (a) IN GENERAL.—The Department of Agriculture
16 Reorganization Act of 1994 (7 U.S.C. 6901 et seq.) is
17 amended—

18 (1) by redesignating subtitle J as subtitle K;

19 and

20 (2) by inserting after section 285 (7 U.S.C.
21 7005) the following:

22 **“Subtitle J—Urban Agriculture**

23 **“SEC. 286. OFFICE OF URBAN AGRICULTURE.**

24 **“(a) OFFICE.—**

1 “(1) IN GENERAL.—The Secretary shall estab-
2 lish in the Agricultural Marketing Service an Office
3 of Urban Agriculture, which shall be headed by a
4 Director appointed by the Secretary.

5 “(2) AUTHORITIES.—The Office of Urban Agri-
6 culture shall manage programs, coordinate agencies,
7 and advise the Secretary on urban agriculture and
8 urban food systems, including—

9 “(A) engaging in external relations with
10 urban agriculture stakeholders;

11 “(B) facilitating interagency and cross-gov-
12 ernment program coordination;

13 “(C) creating resources that identify com-
14 mon State and municipal best practices for
15 navigating local policies;

16 “(D) developing and implementing new
17 policy recommendations;

18 “(E) identifying and working with agencies
19 to update existing guidance for which agricul-
20 tural programs may not have clear policies for
21 urban production;

22 “(F) coordinating resources for technical
23 assistance, training, and outreach; and

24 “(G) other activities as determined by the
25 Secretary.

1 “(b) URBAN AGRICULTURE ADVISORY COM-
2 MITTEE.—

3 “(1) IN GENERAL.—Not later than 180 days
4 after the date of enactment of this section, the Sec-
5 retary shall establish an Urban Agriculture Advisory
6 Committee (referred to in this subsection as the
7 ‘Committee’) to advise the Secretary on—

8 “(A) the development of urban agriculture
9 production policies; and

10 “(B) any other aspects of the implementa-
11 tion of—

12 “(i) this section; and

13 “(ii) the Urban Agriculture Act of
14 2016 and amendments made by that Act.

15 “(2) MEMBERSHIP.—

16 “(A) IN GENERAL.—The Committee shall
17 be composed of 15 members of whom—

18 “(i) 3 shall be individuals who are
19 urban agricultural producers;

20 “(ii) 1 shall be an individual who is
21 an agricultural producer;

22 “(iii) 2 shall be individuals with farm-
23 to-school expertise;

1 “(iv) 2 shall be representatives from
2 an institution of higher education or exten-
3 sion program;

4 “(v) 1 shall be an individual who rep-
5 resents a public health organization;

6 “(vi) 1 shall be an individual who rep-
7 resents an environmental organization;

8 “(vii) 1 shall be an individual who
9 represents a business development entity;

10 “(viii) 1 shall be an individual who
11 represents a city government or is an
12 urban planner;

13 “(ix) 1 shall be an individual who rep-
14 resents an urban food aggregator;

15 “(x) 1 shall be an individual who has
16 extensive experience with farmers markets;
17 and

18 “(xi) 1 shall be an individual from a
19 nonprofit or advocacy group.

20 “(B) INITIAL APPOINTMENTS.—The Sec-
21 retary shall appoint the members of the Com-
22 mittee not later than 180 days after the date of
23 enactment of this section.

24 “(3) PERIOD OF APPOINTMENT; VACANCIES.—

1 “(A) IN GENERAL.—Except as provided in
2 subparagraph (B), a member of the Committee
3 shall be appointed for a term of 3 years.

4 “(B) INITIAL APPOINTMENTS.—Of the
5 members first appointed to the Committee—

6 “(i) the members described in clauses
7 (i) through (iii) of paragraph (2)(A) shall
8 be appointed for a term of 3 years;

9 “(ii) the members described in clauses
10 (iv) through (vii) of paragraph (2)(A) shall
11 be appointed for a term of 2 years; and

12 “(iii) the members described in
13 clauses (viii) through (xi) of paragraph
14 (2)(A) shall be appointed for a term of 1
15 year.

16 “(C) VACANCIES.—Any vacancy in the
17 Committee—

18 “(i) shall not affect the powers of the
19 Committee; and

20 “(ii) shall be filled in the same man-
21 ner as the original appointment.

22 “(4) MEETINGS.—

23 “(A) FREQUENCY.—The Committee shall
24 meet not fewer than 3 times per year.

1 “(B) INITIAL MEETING.—Not later than
2 60 days after the date on which the members
3 are appointed under paragraph (2)(B), the
4 Committee shall hold the first meeting of the
5 Committee.

6 “(5) DUTIES.—

7 “(A) IN GENERAL.—The Committee
8 shall—

9 “(i) develop recommendations regard-
10 ing—

11 “(I) the implementation of—

12 “(aa) this section; and

13 “(bb) the Urban Agriculture
14 Act of 2016 and amendments
15 made by that Act; and

16 “(II) the establishment of ongoing
17 urban agriculture policy priorities
18 and goals;

19 “(ii) review emerging policies and ini-
20 tiatives within the Office of Urban Agri-
21 culture;

22 “(iii) evaluate and review ongoing re-
23 search and extension activities;

1 “(iv) identify new and existing bar-
2 riers to successful urban agriculture prac-
3 tices; and

4 “(v) provide additional assistance and
5 advice to the Secretary as appropriate.

6 “(B) REPORTS.—Not later than 180 days
7 after the date of enactment of this section, and
8 every year thereafter, the Committee shall sub-
9 mit to the Secretary a report describing the ac-
10 tivities of the Committee under subparagraph
11 (A).

12 “(6) PERSONNEL MATTERS.—

13 “(A) COMPENSATION.—A member of the
14 Committee shall serve without compensation.

15 “(B) TRAVEL EXPENSES.—A member of
16 the Committee shall be allowed travel expenses,
17 including per diem in lieu of subsistence, in ac-
18 cordance with section 5703 of title 5, United
19 States Code.

20 “(7) TERMINATION.—

21 “(A) IN GENERAL.—Subject to subpara-
22 graph (B), the Committee shall terminate on
23 the date that is 5 years after the date on which
24 the members are appointed under paragraph
25 (2)(B).

1 “(B) EXTENSIONS.—Before the date on
2 which the Committee terminates, the Secretary
3 may renew the Committee for 1 or more 2-year
4 periods.

5 “(c) COMMUNITY GARDEN PROGRAM.—The Sec-
6 retary shall continue, within the Office of Urban Agri-
7 culture, a community garden program, under which the
8 Director of the Office of Urban Agriculture shall—

9 “(1) develop tools and offer technical assist-
10 ance, education, and resources for community gar-
11 dening and community master gardener classes, in
12 partnership with the National Institute of Food and
13 Agriculture;

14 “(2) consult with Federal building property
15 managers to develop community gardens on Federal
16 property;

17 “(3) coordinate a network of community gar-
18 dens across the United States;

19 “(4) facilitate connections to local food banks,
20 in partnership with the Food and Nutrition Service;
21 and

22 “(5) carry out other activities, as determined by
23 the Secretary.

24 “(d) ROOFTOP AGRICULTURE AND OUTDOOR
25 VERTICAL PRODUCTION PROGRAM.—

1 “(iv) measure environmental impacts
2 of rooftop farms and green roofs;

3 “(v) work with a network of farms to
4 streamline production;

5 “(vi) optimize growing potential for
6 products grown on a rooftop; and

7 “(vii) support other priorities impor-
8 tant to rooftop farming, as determined by
9 the Secretary.

10 “(e) URBAN AGRICULTURE PROGRAM REVIEW.—

11 “(1) IN GENERAL.—Not later than 2 years
12 after the date of enactment of this section, the Sec-
13 retary shall review the programs established under
14 this section and other programs in the Department
15 that support urban agriculture.

16 “(2) REQUIREMENTS.—The review conducted
17 under paragraph (1) shall include—

18 “(A) a comprehensive analysis of resources
19 of the Department;

20 “(B) a description of programs used by
21 urban agricultural producers;

22 “(C) a review of outreach activities and
23 program promotion;

24 “(D) an evaluation of updated policies and
25 guidance documents;

1 “(E) a review of internal collaboration and
2 coordination;

3 “(F) an evaluation of urban agricultural
4 ordinances adopted by State and local govern-
5 ments; and

6 “(G) any priorities identified by the Sec-
7 retary.

8 “(3) REPORT.—Not later than 2 years after the
9 date of enactment of this section, the Secretary shall
10 submit to the Committee on Agriculture of the
11 House of Representatives and the Committee on Ag-
12 riculture, Nutrition, and Forestry of the Senate a
13 report describing the review conducted under para-
14 graph (1).

15 “(f) URBAN AGRICULTURE IMPACT STUDY.—

16 “(1) IN GENERAL.—Not later than 2 years
17 after the date of enactment of this section, the Sec-
18 retary shall conduct a comprehensive study of urban
19 agricultural activities to evaluate the impacts of
20 urban agriculture across the United States.

21 “(2) REQUIREMENTS.—The study conducted
22 under paragraph (1) shall measure—

23 “(A) the community and social benefits of
24 urban agricultural activities;

25 “(B) potential production;

1 “(C) agricultural production site avail-
2 ability, including—

3 “(i) urban farm land;

4 “(ii) rooftop production sites;

5 “(iii) outdoor vertical growing spaces;

6 and

7 “(iv) indoor production sites;

8 “(D) suitability of land for food produc-
9 tion;

10 “(E) the effectiveness of methods used to
11 address food security;

12 “(F) new job opportunities and workforce
13 development;

14 “(G) economic feasibility and opportunities
15 created;

16 “(H) environmental impacts; and

17 “(I) other activities, as determined by the
18 Secretary.

19 “(3) REPORT.—Not later than 2 years after
20 date of enactment of this section, the Secretary shall
21 submit to the Committee on Agriculture of the
22 House of Representatives and the Committee on Ag-
23 riculture, Nutrition, and Forestry of the Senate a
24 report describing the study conducted under para-
25 graph (1).

1 “(g) GRANT AUTHORITY.—

2 “(1) DEFINITION OF ELIGIBLE ENTITY.—In
3 this subsection, the term ‘eligible entity’ means—

4 “(A) a community organization;

5 “(B) a nonprofit organization;

6 “(C) a municipality;

7 “(D) a school or institution of higher edu-
8 cation; and

9 “(E) any other entity as determined by the
10 Secretary.

11 “(2) GRANTS.—The Director of the Office of
12 Urban Agriculture may award competitive grants to
13 eligible entities—

14 “(A) to support urban agriculture develop-
15 ment;

16 “(B) to better coordinate program delivery;
17 and

18 “(C) to enhance community gardens.

19 “(3) FUNDING PRIORITY.—In awarding grants
20 under this subsection, priority shall be given to an
21 eligible entity that uses a grant received under this
22 subsection—

23 “(A)(i)(I) to plan and assess sites for gar-
24 dens or nonprofit farms; or

1 “(II) to construct new gardens or
2 nonprofit farms;

3 “(ii) to operate community gardens or non-
4 profit farms that—

5 “(I) produce food for donation; and

6 “(II) have a demonstrated environ-
7 mental benefit and educational component;
8 and

9 “(iii) to educate a community on—

10 “(I) nutrition; or

11 “(II) pollinator health; or

12 “(B) for other priorities, as designated by
13 the Secretary.

14 “(4) MANDATORY FUNDING.—Of the funds of
15 the Commodity Credit Corporation, the Secretary
16 shall use to carry out this subsection \$5,000,000 for
17 each of fiscal years 2017 through 2021, to remain
18 available until expended.

19 “(h) PRODUCER ASSISTANCE.—Of the funds made
20 available under subsection (j), the Secretary shall provide
21 50 percent to cooperative extension services (as defined
22 in section 1404 of the National Agricultural Research, Ex-
23 tension, and Teaching Policy Act of 1977 (7 U.S.C.
24 3103)) for the purpose of carrying out outreach and tech-
25 nical assistance provided under this section.

1 “(i) FARM NUMBERS.—The Secretary shall provide
2 for the designation of a farm number (as defined in sec-
3 tion 718.2 of title 7, Code of Federal Regulations (as in
4 effect on the date of enactment of the Urban Agriculture
5 Act of 2016)) for rooftop farms, indoor farms, and other
6 urban farms, as determined by the Secretary.

7 “(j) AUTHORIZATION OF APPROPRIATIONS.—In addi-
8 tion to amounts made available under subsection (g)(4),
9 there is authorized to be appropriated to carry out this
10 section \$10,000,000 for each fiscal year.”.

11 (b) CONFORMING AMENDMENT.—Section 296(b) of
12 the Department of Agriculture Reorganization Act of
13 1994 (7 U.S.C. 7014(b)) is amended by adding at the end
14 the following:

15 “(9) The authority of the Secretary to carry out
16 subtitle J.”.

17 **TITLE II—FARM ENTERPRISE**
18 **DEVELOPMENT**

19 **SEC. 201. FARM BUSINESS PLANNING PROGRAM.**

20 Subtitle D of the Consolidated Farm and Rural De-
21 velopment Act is amended by inserting after section 365
22 (7 U.S.C. 2008) the following:

23 **“SEC. 366. FARM BUSINESS PLANNING PROGRAM.**

24 “(a) DEFINITION OF URBAN FARMER.—In this sec-
25 tion, the term ‘urban farmer’ means a beginning farmer

1 or rancher that is farming in an urban area, as determined
2 by the Secretary.

3 “(b) REQUIREMENT.—The Secretary shall, with re-
4 spect to urban farmers—

5 “(1) identify and improve farm business edu-
6 cation programs; and

7 “(2) provide, and facilitate the provision of,
8 technical assistance.

9 “(c) REVIEW AND IMPLEMENTATION OF BUSINESS
10 DEVELOPMENT PROGRAMS.—

11 “(1) PROGRAM REVIEW.—The Secretary shall
12 conduct a review of all farm business planning, edu-
13 cation, outreach, and technical assistance programs
14 provided to beginning farmers and ranchers, with a
15 focus on urban farmers, to identify methods—

16 “(A) to improve program delivery and out-
17 reach;

18 “(B) to improve the longevity of new farm
19 enterprises;

20 “(C) to increase financial literacy;

21 “(D) to provide more ongoing business
22 support;

23 “(E) to develop and maintain good agricul-
24 tural practices and food safety recordkeeping
25 materials; and

1 “(F) to examine ways to improve inter-
2 agency interoperability of administrative and
3 statistical data.

4 “(2) COLLABORATION.—The Secretary shall
5 consult and collaborate with other Federal agencies
6 to review related business development programs for
7 beginning farmers and ranchers.

8 “(3) PROGRAM IMPLEMENTATION.—After com-
9 pleting the program review described in paragraph
10 (1), the Secretary shall—

11 “(A) develop and adopt best practices for
12 program delivery and provide the best practices
13 to urban farmers;

14 “(B) implement strategies to improve the
15 business planning, budget skills, and financial
16 literacy of urban farmers; and

17 “(C) based on the findings of the program
18 review, develop and implement performance
19 metrics across the Department of Agriculture to
20 improve financial success for each farmer—

21 “(i) with little or no credit history; or

22 “(ii) that is unable to qualify for tra-
23 ditional lines of credit.

24 “(d) FARM MANAGEMENT AND PROFESSIONAL DE-
25 VELOPMENT PROGRAM.—

1 “(1) ESTABLISHMENT.—The Secretary shall es-
2 tablish and administer a voluntary program of farm-
3 er-to-farmer assistance and mentorship between—

4 “(A) established farmers, ranchers, and
5 agribusiness specialists; and

6 “(B) beginning farmers and ranchers.

7 “(2) GOALS.—The goals of the program under
8 this subsection shall be—

9 “(A) to provide to beginning farmers and
10 ranchers (with a focus on urban farmers) as-
11 sistance in farm business management practices
12 by improving—

13 “(i) agribusiness acumen;

14 “(ii) marketing operations;

15 “(iii) the establishment of record-
16 keeping systems;

17 “(iv) integrated use of risk manage-
18 ment tools; and

19 “(v) credit management;

20 “(B) to transfer the knowledge and exper-
21 tise of established agricultural producers and
22 businesses, on an individual basis to beginning
23 farmers and ranchers that desire to participate
24 in an ongoing mentorship and professional de-
25 velopment program; or

1 “(C) to encourage the development of
2 other farm-to-farm exchange programs for be-
3 ginning farmers and ranchers for expanded
4 learning and training opportunities.

5 “(e) REPORTS TO CONGRESS.—

6 “(1) IN GENERAL.—Not later than 1 year after
7 the date of enactment of the Urban Agriculture Act
8 of 2016, the Secretary shall submit to the Com-
9 mittee on Agriculture of the House of Representa-
10 tives and the Committee on Agriculture, Nutrition,
11 and Forestry of the Senate a report that includes—

12 “(A) a description of the programs under
13 this section;

14 “(B) an outline of intended future per-
15 formance metrics—

16 “(i) to improve the effectiveness of
17 farm business development;

18 “(ii) to support the collection of addi-
19 tional information on agricultural producer
20 retention; and

21 “(iii) to increase new market opportu-
22 nities; and

23 “(C) performance metrics that are specific
24 to urban farmers.

1 “(2) ANNUAL PROGRESS REPORT.—Each year
2 during the 5-year period beginning on the date on
3 which the Secretary submits the report described in
4 paragraph (1), the Secretary shall submit to the
5 Committees described in that paragraph an annual
6 progress report on the performance metrics outlined
7 in the report described in paragraph (1).

8 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
9 is authorized to be appropriated to carry out this section
10 \$2,000,000 for each of fiscal years 2017 through 2021.”.

11 **SEC. 202. URBAN AGRICULTURE COOPERATIVES.**

12 Section 310B(e)(2) of the Consolidated Farm and
13 Rural Development Act (7 U.S.C. 1932(e)(2)) is amended
14 by inserting “, including centers located outside rural
15 areas only if the focus of the activities of the center is
16 agricultural production” before the period at the end.

17 **SEC. 203. RISK MANAGEMENT.**

18 Section 196 of the Federal Agriculture Improvement
19 and Reform Act of 1996 (7 U.S.C. 7333) is amended—

20 (1) in subsection (e)(1), by inserting “, except
21 for urban agriculture production sites” before the
22 period at the end;

23 (2) in subsection (l)—

24 (A) by redesignating paragraph (5) as
25 paragraph (6); and

1 (B) by inserting after paragraph (4) the
2 following:

3 “(5) ALTERNATIVE PRICE CALCULATIONS.—As
4 an alternative to the average market price calcula-
5 tion under paragraph (1)(B), and notwithstanding
6 any other provision of this section, the Secretary
7 may make assistance available to producers under
8 this subsection on a whole-farm, revenue, or yield
9 basis using contract or local prices, as determined by
10 the Secretary.”; and

11 (3) by adding at the end the following:

12 “(m) COST-SHARE.—In addition to the coverage de-
13 scribed in subsection (1)(4), the Secretary, acting through
14 the Administrator of the Farm Service Agency, shall pro-
15 vide a \$500 cost-share program for limited resource, be-
16 ginning, and socially disadvantaged farmers for the first
17 year of coverage of those farmers under this section.”.

18 **SEC. 204. EXPANDED LOANS FOR FARM EQUIPMENT.**

19 (a) COOPERATIVE LOANS FOR COOPERATIVES OF
20 FARMERS.—Section 316(a) of the Consolidated Farm and
21 Rural Development Act (7 U.S.C. 1946(a)) is amended
22 by adding at the end the following:

23 “(3) LOANS TO COOPERATIVES.—Notwith-
24 standing subtitle A or this subtitle, the liability for
25 a farm ownership loan or a farm operating loan

1 under those subtitles to a cooperative of family farm
2 farmers shall not be required to attach to the indi-
3 vidual members of the cooperative, as determined by
4 the Secretary.”.

5 (b) FARM STORAGE FACILITY LOANS.—Section 5(a)
6 of the Commodity Credit Corporation Charter Act (16
7 U.S.C. 714c(a)) is amended by inserting before the period
8 at the end the following: “, including farm storage facility
9 loans to farmers for agriculturally related, nonfarm enter-
10 prises that support agricultural operations (as determined
11 by the Secretary)”.

12 **TITLE III—A HEALTHIER** 13 **ENVIRONMENT**

14 **SEC. 301. SOIL ASSESSMENT.**

15 Subtitle J of the Department of Agriculture Reorga-
16 nization Act of 1994 (as amended by section 101) is
17 amended by adding at the end the following:

18 **“SEC. 287. SOIL ASSESSMENT.**

19 “(a) SOIL CONSULTATION.—

20 “(1) SOIL TESTING PROTOCOL.—The Secretary,
21 acting through the Under Secretary of Agriculture
22 for Natural Resources and Environment and the
23 Under Secretary of Agriculture for Research, Edu-
24 cation, and Economics, shall establish a coordinated
25 soil testing protocol to simplify the process used by

1 agricultural producers and small-scale producers of
2 food to evaluate soil health, including testing for—

3 “(A) the optimal level of constituents in
4 and characteristics of the soil, such as organic
5 matter, nutrients, and the potential presence of
6 soil contamination from heavy metals such as
7 lead or other contaminants; and

8 “(B) biological and physical characteristics
9 indicative of proper soil functioning.

10 “(2) RESEARCH.—

11 “(A) IN GENERAL.—The Secretary, acting
12 through the Chief of the Natural Resources
13 Conservation Service and the Director of the
14 National Institute of Food and Agriculture,
15 shall coordinate and conduct research to inform
16 the soil testing protocol and soil remediation
17 practices with respect to soil contaminated with
18 high levels of heavy metals or other contami-
19 nants—

20 “(i) to remediate, or otherwise man-
21 age appropriately, the soil; and

22 “(ii) to assess and manage for proper
23 soil functioning the soil for sustained bio-
24 logical and physical health.

1 “(B) REQUIREMENTS.—The Secretary
2 shall—

3 “(i) determine metrics used to meas-
4 ure soil health, quality, and safety;

5 “(ii) in coordination with the heads of
6 other Federal agencies, as appropriate, de-
7 velop agricultural best practices with re-
8 spect to soil contaminated with undesirable
9 levels of heavy metals or other contami-
10 nants—

11 “(I) to remediate, or otherwise
12 manage appropriately, the soil before
13 agricultural production begins on the
14 land; and

15 “(II) to maintain the health of
16 the soil for future use; and

17 “(iii) evaluate soil quality for food
18 production.

19 “(3) CONSULTATION.—

20 “(A) IN GENERAL.—An eligible entity de-
21 scribed in subparagraph (B) may seek technical
22 assistance from the Secretary about options to
23 evaluate soil health, safety, and quality of
24 urban soils and contaminated or degraded land
25 to ensure the soil used by agricultural pro-

1 ducers is suitable for producing agricultural
2 products for human consumption.

3 “(B) ELIGIBLE ENTITIES.—An eligible en-
4 tity may include—

5 “(i) an agricultural producer;

6 “(ii) a nonprofit organization;

7 “(iii) a school or institution of higher
8 education;

9 “(iv) a community gardener;

10 “(v) a State, local, or tribal govern-
11 ment; and

12 “(vi) another entity as determined by
13 the Secretary.

14 “(4) REFERRAL.—The Secretary shall refer any
15 eligible entity receiving consultation under para-
16 graph (3) that the Secretary determines has a high
17 level of contamination to the Administrator of the
18 Environmental Protection Agency for remediation
19 under section 104(k) of the Comprehensive Environ-
20 mental Response, Compensation, and Liability Act
21 of 1980 (42 U.S.C. 9604(k)).

22 “(5) EVALUATION.—Not later than 2 years
23 after the date of enactment of this section, the Sec-
24 retary shall submit to the Committee on Agriculture
25 of the House of Representatives and the Committee

1 on Agriculture, Nutrition, and Forestry of the Sen-
2 ate a report that evaluates the overall effectiveness
3 of this subsection.

4 “(b) SOIL TESTING AND REMEDIATION PRAC-
5 TICES.—

6 “(1) IN GENERAL.—The Secretary shall estab-
7 lish a national soil testing and remediation program
8 to provide technical and financial assistance to agri-
9 cultural producers for—

10 “(A) implementing the soil testing protocol
11 under subsection (a)(1) for determining the
12 suitability of the soil of the agricultural pro-
13 ducer for—

14 “(i) producing agricultural products
15 for human consumption; and

16 “(ii) continued agricultural produc-
17 tion; and

18 “(B) adopting practices to mitigate any
19 soil contamination or degradation found as a
20 result of the soil testing.

21 “(2) TECHNICAL ASSISTANCE AND PRODUCER
22 REMEDIATION.—The Secretary shall provide infor-
23 mation, resources, and other technical assistance to
24 agricultural producers that shall include—

1 “(A) an initial assessment of soil test re-
2 sults;

3 “(B) a determination of soil quality, soil
4 health, and level of contamination of soil—

5 “(i) to limit contaminants from enter-
6 ing agricultural products for human con-
7 sumption; and

8 “(ii) to regenerate and sustain the
9 soil;

10 “(C) the provision of resources and best
11 practices to agricultural producers regarding
12 methods to keep soils healthy;

13 “(D) education, outreach, and technical as-
14 sistance regarding the uses of soil and methods
15 of addressing soil contamination and soil health
16 degradation; and

17 “(E) recommendations on methods to con-
18 duct remediation or soil building efforts to im-
19 prove soils and ensure that the agriculture pro-
20 ducers—

21 “(i) are not growing products in soils
22 with high levels of heavy metals or other
23 contaminants;

1 “(ii) have appropriate information re-
2 garding methods and programs to assist
3 with soil remediation; and

4 “(iii) have access to experts that can
5 provide assistance to oversee and monitor
6 soil under remediation or regeneration to
7 ensure soils are suitable for agriculture
8 production in the future.

9 “(3) SOIL TESTING AND REMEDIATION PRAC-
10 TICES.—The Secretary shall expand covered prac-
11 tices under the environmental quality incentives pro-
12 gram established under chapter 4 of subtitle D of
13 title XII of the Food Security Act of 1985 (16
14 U.S.C. 3839aa et seq.) to include—

15 “(A) soil tests for—

16 “(i) heavy metals or other contami-
17 nants; and

18 “(ii) biological and physical soil
19 health; and

20 “(B) producer soil remediation practices as
21 determined by the Secretary.

22 “(4) REPORTING.—Not later than March 1 of
23 each year, the Secretary shall submit to the Com-
24 mittee on Agriculture of the House of Representa-
25 tives and the Committee on Agriculture, Nutrition,

1 and Forestry of the Senate a report that describes
2 the requests by, disbursements to, and expenditures
3 for each State under this subsection during the cur-
4 rent and previous fiscal year, including the number
5 of agricultural producers served by the program
6 under this subsection in the previous fiscal year.”.

7 **SEC. 302. INNOVATIVE URBAN CONSERVATION.**

8 Section 1240H(a)(2) of the Food Security Act of
9 1985 (16 U.S.C. 3839aa–8(a)(2)) is amended—

10 (1) by redesignating subparagraphs (E) and
11 (F) as subparagraphs (F) and (G), respectively; and

12 (2) by inserting after subparagraph (D) the fol-
13 lowing:

14 “(E) partner with urban farmers to de-
15 velop innovative conservation practices in urban
16 areas to increase—

17 “(i) green space;

18 “(ii) pollinator habitat;

19 “(iii) stormwater management;

20 “(iv) carbon sequestration; and

21 “(v) access to agricultural production
22 sites through land tenure agreements and
23 other contracts;”.

1 **SEC. 303. PILOT PROJECTS TO INCREASE COMMUNITY**
2 **COMPOST.**

3 (a) **IN GENERAL.**—The Secretary shall carry out
4 pilot projects under which local or municipal governments,
5 in not fewer than 10 States, shall enter into cooperative
6 agreements with the Secretary to develop and test strate-
7 gies for planning and implementing municipal compost
8 and food waste reduction plans.

9 (b) **ELIGIBLE ENTITIES AND ACTIVITIES.**—Under a
10 cooperative agreement entered into under this section, the
11 Secretary shall provide assistance to a municipalities,
12 counties, local governments, or city planners, as appro-
13 priate, to carry out activities that will—

14 (1) increase access to compost for agricultural
15 producers;

16 (2) reduce reliance on, and limit use of, excess
17 fertilizer;

18 (3) improve soil quality;

19 (4) encourage waste management and
20 permaculture business development;

21 (5) increase rainwater absorption;

22 (6) reduce municipal food waste; and

23 (7) divert waste from landfills.

24 (c) **EVALUATION AND RANKING OF APPLICATIONS.**—

25 (1) **CRITERIA.**—The Secretary shall establish
26 evaluation and ranking criteria to maximize the ben-

1 efit of Federal investment in pilot projects under
2 this section.

3 (2) CONSIDERATIONS.—In establishing the se-
4 lection criteria for the pilot projects, the Secretary
5 shall prioritize applications that—

6 (A) anticipate or demonstrate economic
7 benefits;

8 (B) incorporate plans to make compost
9 easily accessible to all agricultural producers,
10 including community gardeners;

11 (C) integrate other food waste strategies,
12 including food recovery efforts;

13 (D) collaborate with multiple partners; and

14 (E) fulfill other priorities as determined by
15 the Secretary.

16 (3) EVALUATION.—To be eligible for a pilot
17 project under this section, an eligible entity shall
18 agree to participate in an evaluation, as determined
19 by the Secretary, of the pilot project.

20 (d) MATCHING REQUIREMENT.—The recipient of as-
21 sistance for a pilot project under this section shall provide
22 funds, in-kind contributions, or a combination of both
23 from sources other than funds provided through the grant
24 in an amount equal to not less than 25 percent of the
25 amount of the grant.

1 (e) REPORT.—Not later than 4 years after the date
2 of enactment of this Act, the Secretary shall submit to
3 the Committee on Agriculture of the House of Representa-
4 tives and the Committee on Agriculture, Nutrition, and
5 Forestry of the Senate a report that contains an evalua-
6 tion of the pilot projects authorized under this section.

7 (f) FUNDING.—There is authorized to be appro-
8 priated to carry out this section \$5,000,000 for fiscal year
9 2018.

10 **SEC. 304. HEALTHY FOOD HEALTHY ENVIRONMENT PILOT**
11 **PROGRAM.**

12 (a) DEFINITION OF ELIGIBLE ENTITY.—In this sec-
13 tion, the term “eligible entity” means—

- 14 (1) a nonprofit organization;
- 15 (2) an agriculture cooperative;
- 16 (3) a producer network or association;
- 17 (4) a community health organization;
- 18 (5) a public benefit corporation;
- 19 (6) an economic development corporation;
- 20 (7) a community supported agriculture pro-
21 gram;
- 22 (8) an institution of higher education;
- 23 (9) a State, local, or tribal agency; and
- 24 (10) any other entity designated by the Sec-
25 retary.

1 (b) HEALTHY FOOD HEALTHY ENVIRONMENT PILOT
2 PROJECTS.—

3 (1) IN GENERAL.—The Secretary shall make
4 competitive grants to eligible entities to conduct pilot
5 projects that strengthen marketplace links between
6 healthy food consumption, good environmental prac-
7 tices, and direct public health outcomes.

8 (2) CRITERIA.—In selecting pilot projects to re-
9 ceive grants under this section, the Secretary shall—

10 (A) support pilot projects that—

11 (i) develop innovative marketing and
12 incentive approaches to improve purchases
13 of healthy foods;

14 (ii) have demonstrated community
15 and partnership support from local plan-
16 ning entities;

17 (iii) use strategies that improve use of
18 agricultural producer conservation prac-
19 tices;

20 (iv) provide to communities evidence-
21 based nutrition and environmental edu-
22 cation;

23 (v) agree to participate in the evalua-
24 tion described in subsection (c); and

- 1 (vi) meet additional criteria estab-
2 lished by the Secretary; and
3 (B) give priority to pilot projects that—
4 (i) are located in—
5 (I) underserved communities; or
6 (II) identified food deserts;
7 (ii) equally target good conservation
8 practices and healthy food consumption;
9 (iii) demonstrate strong urban, subur-
10 ban, and rural linkages;
11 (iv) provide locally or regionally pro-
12 duced fruits and vegetables; and
13 (v) address other criteria as estab-
14 lished by the Secretary.

15 (3) LOCATION REQUIREMENTS.—The Secretary
16 shall ensure that at least 2 pilot projects are located
17 in each of the following:

- 18 (A) Urban communities.
19 (B) Rural communities.
20 (C) Peri-urban communities.

21 (4) LIMITATION.—The maximum amount of
22 grant funds received by an eligible entity under this
23 section shall be \$150,000.

1 (5) DURATION.—The maximum duration of a
2 grant received by an eligible entity under this section
3 shall be 3 years.

4 (c) EVALUATION.—

5 (1) IN GENERAL.—The Secretary shall conduct
6 an evaluation of the pilot projects funded under this
7 section that—

8 (A) measures the environmental impacts of
9 good conservation practices;

10 (B) measures increases in the consumption
11 of healthy foods attributable to the projects;

12 (C) evaluates economic benefit in partici-
13 pating communities;

14 (D) provides for an overall assessment of
15 public health outcomes due to improved healthy
16 food consumption in selected communities; and

17 (E) assesses such other metrics as may be
18 determined by the Secretary.

19 (2) COSTS.—The Secretary may use not more
20 than 10 percent of the funds made available to carry
21 out this section to pay costs associated with con-
22 ducting the evaluation under this subsection.

23 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated to carry out this section
25 \$5,000,000 for each of fiscal years 2017 through 2021.

1 **TITLE IV—RESEARCH,**
2 **INNOVATION, AND TECHNOLOGY**

3 **SEC. 401. URBAN FOOD PRODUCTION AND MARKET DATA**
4 **INITIATIVES.**

5 Section 10016(b) of the Agricultural Act of 2014 (7
6 U.S.C. 2204h(b)) is amended—

7 (1) in paragraph (5), by striking “and” at the
8 end;

9 (2) in paragraph (6), by striking the period at
10 the end and inserting “; and”; and

11 (3) by adding at the end the following:

12 “(7) include information pertaining to produc-
13 tion of food within urban and peri-urban areas, col-
14 lecting data, and measuring impacts of the market
15 for all types of production methods.”.

16 **SEC. 402. DATA COLLECTION ON URBAN AGRICULTURE.**

17 Section 2 of the Census of Agriculture Act of 1997
18 (7 U.S.C. 2204g) is amended by adding at the end the
19 following:

20 “(h) DATA COLLECTION ON URBAN AGRI-
21 CULTURE.—

22 “(1) IN GENERAL.—The Secretary shall con-
23 duct as a follow-on study to the census of agri-
24 culture required to be conducted in 2017 a census
25 of urban agriculture, including information about—

1 “(A) farms located in urban areas, peri-
2 urban areas, and town centers;

3 “(B) rooftop farms, outdoor vertical pro-
4 duction, and green walls;

5 “(C) indoor farms, greenhouses, and high-
6 tech vertical technology farms;

7 “(D) hydroponic, aeroponic, and aquaponic
8 farm facilities; and

9 “(E) other activities as determined by the
10 Secretary.

11 “(2) AUTHORIZATION OF APPROPRIATIONS.—

12 There is authorized to be appropriated to carry out
13 this subsection \$8,000,000 for fiscal years 2017 and
14 2018.”.

15 **SEC. 403. URBAN AGRICULTURE RESEARCH, EDUCATION,**
16 **AND EXTENSION INITIATIVE.**

17 Subtitle H of the Food, Agriculture, Conservation,
18 and Trade Act of 1990 is amended by inserting after sec-
19 tion 1672D (7 U.S.C. 5925f) the following:

20 **“SEC. 1672E. URBAN AGRICULTURE RESEARCH, EDU-**
21 **CATION, AND EXTENSION INITIATIVE.**

22 “(a) COMPETITIVE RESEARCH AND EXTENSION
23 GRANTS AUTHORIZED.—In consultation with the Urban
24 Agriculture Advisory Board, the Secretary may make com-
25 petitive grants to support research, education, and exten-

1 sion activities for the purposes of enhancing agricultural
2 production in urban areas by—

3 “(1) facilitating the development of urban agri-
4 culture production, transportation, aggregation, dis-
5 tribution, and markets;

6 “(2) assessing and developing strategies to re-
7 mediate contaminated sites;

8 “(3) determining and developing the best pro-
9 duction management and integrated pest manage-
10 ment practices;

11 “(4) identifying and promoting the horti-
12 cultural, social, and economic factors that contribute
13 to successful urban agriculture production;

14 “(5) analyzing the means by which new urban
15 agricultural sites are determined, including an eval-
16 uation of soil quality and local community needs;

17 “(6) exploring new and innovative technologies
18 that minimize energy and water inputs for increased
19 food production in urban centers;

20 “(7) studying and developing new and innova-
21 tive agricultural products to connect to urban mar-
22 kets;

23 “(8) examining how crop exposure to urban ele-
24 ments impacts environmental quality and food safe-
25 ty;

1 “(9) conducting research relating to indoor
2 vertical farm research and controlled-environment
3 agriculture production, including—

4 “(A) efficiencies in energy, lighting sys-
5 tems, and water usage of indoor production sys-
6 tems;

7 “(B) genetic resources for increasing the
8 resistance of plants to urban and environmental
9 stresses;

10 “(C) innovative production systems, includ-
11 ing hydroponic, aeroponic, and aquaponics sys-
12 tems; and

13 “(D) innovative indoor growing methods of
14 traditional and nontraditional agricultural prod-
15 ucts; and

16 “(10) conducting other activities that are rel-
17 evant to enhancing urban agricultural production, as
18 determined by the Secretary.

19 “(b) GRANT TYPES AND PROCESS.—Paragraphs (4)
20 and (7) of subsection (b) of the Competitive, Special, and
21 Facilities Research Grant Act (7 U.S.C. 450i) shall apply
22 with respect to the making of grants under this section.

23 “(c) PRIORITY.—The Secretary may give priority to
24 grant proposals that involve—

25 “(1) the cooperation of multiple entities; or

1 “(2) States or regions with a high concentration
2 of urban farms, rooftop farms, and indoor produc-
3 tion facilities.

4 “(d) FUNDING.—

5 “(1) MANDATORY FUNDING.—Of the funds of
6 the Commodity Credit Corporation, the Secretary
7 shall use to carry out this section \$10,000,000 for
8 each fiscal year, to remain available until expended.

9 “(2) AUTHORIZATION OF APPROPRIATIONS.—In
10 addition to amounts made available under paragraph
11 (1), there is authorized to be appropriated to carry
12 out this section \$10,000,000 for each of fiscal years
13 2017 through 2021.”.