Summary of the Health Impact Assessment of The 2002 Federal Farm Bill

Partnership for Prevention/UCLA School of Public Health
Health Impact Assessment Project
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Summary of the Farm Bill
The Farm Security and Rural Investment Act of 2002, (the 2002 Farm Bill), signed into law on May 2002, creates regulations and provides funding for a vast array of programs relating to agricultural, environmental, and nutrition policy. The ten titles of the Farm Bill mandate a wide range of changes that include:

- Expansion of agricultural commodity price support and marketing programs;
- Increased spending for conservation programs;
- New regulations governing international trade of agricultural products;
- Expansion of research programs in forestry and bio-energy;
- Increased funding for rural development;
- Expansion of the Food Stamp program.

The Farm Bill increases spending by $82.8 billion over the next ten years to a total of $458.7 billion.

Summary of health impacts
The 2002 Farm Bill is a major piece of legislation whose provisions include a vast array of regulations and funding for programs. The Bill is likely to have noteworthy beneficial and detrimental health effects on the U.S. population which stem primarily from provisions relating to nutrition, bio-energy, and agricultural subsidies. There are also undoubtedly indirect health effects related to budgetary effects, opportunity costs for government agencies, and regional and sectoral redistribution effects (i.e. redistributing largely urban, non-farm tax revenues to rural farming areas), however a lack of data and uncertainties about the nature and scope of all these effects make them difficult to quantify.

Health impacts examined
This health impact assessment (HIA) highlights aspects of the new Farm Bill most likely to influence health. The HIA aims to help policy makers understand the linkages between policy change, intermediates and health outcomes. The assessment identified five major pathways through which the new legislation can impact health status:

1. Dietary Consumption
2. Food Safety
3. Rural Income and Quality of Life
4. Air Pollution
5. Environmental degradation

This HIA focused on two of these pathways, dietary consumption and air pollution. Dietary consumption is affected through farm subsidy policy and air pollution through ethanol production. Due to data limitations we were not able quantify the potential impacts from these pathways.

What is the Farm Bill?
Historically the Farm Bill was intended to stabilize the nation’s food supply by controlling agricultural commodity prices and production levels by redistributing risk from individual farmers in one season to taxpayers over many years. To this end, the Bill provides financial assistance to farmers through subsidy programs. Prevalent ideology on how best to stabilize agricultural production has changed in recent years; in 1996 agricultural policy shifted away from subsidizing small family farms in favor of large, corporate farms. The 2002 Farm Bill, which will be in effect until 2011, continues this trend, further decreasing agricultural subsidies to small farmers.

In addition to providing farm subsidies, the Farm Bill regulates the production and distribution of renewable energy sources; encourages economic development in rural areas and the conservation of rural land; and provides millions of families with food assistance through the Food Stamp and Women, Infants, and Children (WIC) programs.

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1 The Health Impact Assessment Project is based at the UCLA School of Public Health. Project staff include: Jonathan Fielding, M.D., M.P.H., M.B.A., Principal Investigator; Gerald Kominski, Ph.D., Co-principal Investigator; Hal Morgenstern, Ph.D., Co-principal Investigator; Brian Cole, Program Manager; Riti Shimkhada and Sheng Wu, Research Assistants

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<table>
<thead>
<tr>
<th>Major Findings</th>
<th>Other potential health impacts of concern</th>
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<tbody>
<tr>
<td>• There is no clear relationship between changes in farm subsidy policy and consumption patterns.</td>
<td>• U.S Farm Subsidies cost poor countries about $50 billion each year in lost agricultural exports.</td>
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<td>The Farm Bill changes the structure of government support for commodities by increasing the level of subsidies offered to certain farmers. However, most of the increased subsidies do not go to small family-farms with the most need, but are primarily distributed to larger and medium farms run by corporations.</td>
<td>High subsidy rates allow the U.S. to export wheat and corn below cost, thus potentially disabling small farmers in developing countries to market their goods. Apart from having negative impacts on the health and livelihoods of small farmers in poor countries, this may encourage the consumption of American corn and wheat, which may be less nutritious than other grains and has been implicated as a contributor to overweight.</td>
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<td>The changes to commodity programs and subsidy-levels affect the costs of production, which can in turn affect the price consumers pay for food. Despite the connection between subsidies and eventual food prices, farm prices make up on a small fraction of final retail prices and consumer responsiveness to price changes. Therefore, changes in subsidies are unlikely to have a noticeable impact on consumer purchasing and consumption of affected goods, and the health impacts are likely to be minimal.</td>
<td>• Government farm subsidies may lead to greater income inequality in rural areas.</td>
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<td>Nevertheless, the 2002 Farm Bill has far reaching direct and indirect affects on food production and consumption, land conservation, and air pollution levels all of which have potential health impacts.</td>
<td>Because most farm subsidies go to large corporate farms, it is likely that such payment programs exacerbate the financial divide between large and small farm owners.</td>
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<th>Limitations</th>
<th>Why examine health impacts?</th>
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<td>This HIA does not provide exhaustive documentation of all potential health impacts of the Farm Bill; rather it attempts to highlight those areas deemed most prominent, in particular farm subsidies and ethanol production. The full scope and magnitude of most of these potential effects cannot be ascertained without substantial increases in available data. Further, even within areas for which more data is available, the conclusions of different experts hinge largely on different assumptions in competing quantitative models. The purpose of this HIA was then to demonstrate the linkages between agriculture policy changes and health outcomes as an example of how HIA can be used as a tool for swift assessment of a national policy's impacts on health.</td>
<td>Agriculture is intimately intertwined with a number of diverse areas; economics, environment, energy, nutrition, and rural development. As such, the 2002 Farm Bill has far reaching direct and indirect affects on food production and consumption, land conservation, and air pollution levels all of which have potential health impacts.</td>
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<tr>
<th>Links to more information:</th>
<th>America’s Obesity: Conflicting Public Policies, Industrial Economic Development, and Unintended Human Consequences – James E. Tillotson</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCLC Public Affairs Information Service: Agricultural Aid</td>
<td></td>
</tr>
<tr>
<td>The Limits of Biomass Energy Utilization - David Pimentel</td>
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<td><a href="http://www.urbanrenaissance.org/urbanren/publications/Pimentel-BIOMASS.doc">http://www.urbanrenaissance.org/urbanren/publications/Pimentel-BIOMASS.doc</a></td>
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Pathways through which the 2002 Farm Bill can impact health

- Title I Commodities
- Title II Conservation
- Title III Trade
- Title IV Nutrition
- Title V Credit
- Title VI Rural develop.
- Title VII Research
- Title VIII Forestry
- Title IX Energy
- Title X Miscellaneous

Rural Income & Quality-of-Life
- Poverty
- Lifestyle
- Preservation of the family-farm & farming community

Dietary Consumption Patterns
- Fruit & vegetable consumption
- Consumption of processed, calorically-dense food
- Consumption of domestically grown/raised products

Food Safety
- Agricultural biodiversity
- Irradiated food
- Genetically modified & organic foods

Environmental Pollution
- Water pollution
- Air pollution

Other Environmental Degradation
- Soil degradation
- Natural resource depletion

UCLA Health Impact Assessment Project
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Logic Framework for the HIA of the 2002 Federal Farm Bill: Agricultural Subsidies

Policy  Proximal Impacts  Intermediate Outcomes  Health Outcomes

- Commodity price supports
- Commodity prices
- Retail food product prices
- Purchasing patterns
- Dietary Consumption

Intermediate Outcomes:
- Farm Income
- Rural Quality-of-Life

Health Outcomes:
- Physical Health Outcomes

1 Examples of dietary consumption patterns that might be affected include consumption of highly processed foods, calorically dense foods, meat/vegetable mix.

2 Examples of physical health outcomes associated with dietary consumption include cardiovascular diseases, diabetes, cancer and micronutrient deficiencies.
Logic Framework for the HIA of the 2002 Federal Farm Bill: Subsidies to Support Ethanol Production

Policy

Ethanol production

Proximal Impacts

Ethanol transport for use

Substitution for/adjunct to petroleum-based fuels

Air pollution

Fossil fuels

Intermediate Outcomes

Fuel-crop (i.e. corn) production

Water pollution

Physical Health Outcomes

Health Outcomes

Restricted food crop supply

Food prices

Dietary consumption

1 Examples of dietary consumption patterns that might be affected include consumption of highly processed foods, calorically dense foods, meat/vegetable mix.

2 Examples of physical health outcomes associated with pollution include cancer and respiratory diseases; health outcomes associated with dietary consumption include cardiovascular diseases, diabetes, cancer, and micronutrient deficiencies.