#### Plan text: The United States ought to recognize an unconditional right to strike for agricultural laborers.

#### Normal means is NRLA

**Reilly, 11**, Penn State Law, “Agricultural Laborers: Their Inability to Unionize Under the National Labor Relations Act”, Penn State: Masters of Science, JD Law, URL: <https://pennstatelaw.psu.edu/_file/aglaw/Publications_Library/Agricultural_Laborers.pdf>, 2011 + since most recent citation is from then, KR

**The NLRA gives workers “freedom of association, self-organization, and designation of representatives of their own choosing” in order to equalize the bargaining power** between employers and employees in the hopes of limiting the interruptions to the free flow of commerce.10 **The statute covers a large number of workers based on the broad definition of “employee,”11 but excludes from coverage all agricultural laborers**.12 The NLRA does not define who these agricultural laborers are that are excluded from the right to organize, but rather Congress has instructed the National Labor Relations Boards (NLRB)13 in the annual Appropriations Act that in determining who is an agricultural laborer excluded from the NLRA, to rely on the definition of “agriculture” **found in the Fair Labor Standards Act (FLSA).14 Agriculture in the FLSA is defined as “farming in all its branches ... and any practices ...** performed by a farmer or on a farm as an incident to or in conjunction with such farming operations...”15 The definition also lists specific activities to further define what would specifically be considered agricultural work.16 Therefore, workers whose responsibilities are contained in the FLSA’s definition of “agriculture” are excluded from the right to organize and form unions under the NLRA.

The reasoning behind this exclusion is somewhat vague, especially considering that the bill originally proposed in the Senate did not exclude agricultural laborers from the definition of “employee.”17 There is not much mentioned about the agricultural exclusion because of the statute’s primary focus on addressing problems in the industrial sector. There is, however, a debate from in the House addressing the agricultural laborer exemption,18 where an argument was made that **agricultural laborers should be included because they needed the same protections as industrial** workers. Agricultural labor issues were brought to light in 1935 after governmental investigations into child labor issues and the lack of clean water provided for such workers.19

In response, **two possible reasons were briefly mentioned that may explain why agricultural laborers were excluded: first, in regions like the Midwest, farms are mostly family farms and should not be within the scope of the NLRA,** and second there was a concern that Congress did not have jurisdiction over agricultural workers because it was questionable whether such workers were engaged in interstate commerce.20 Many commentators believe that it was the former argument that led to the exclusion of agricultural workers from protection under the NLRA. Another possible reason for this exclusion as presented by some commentators is that the larger farms lobbied to have their workers excluded from the NLRA.21 While not expressly stated, the most likely explanation is that Congress wanted to protect the family farmer from having to pay higher wages that unions would inevitably demand of the employers.22 Realizing that agriculture was important to the entire nation, Congress wanted to shield this industry from unionization, and wanted to protect the family farmer from having to pay what they could not afford. Congress did not think it necessary to equate the family farmer with big business.

The broad definition of “agriculture” under the FLSA would seem to exclude from the NLRA any worker who is employed by any agricultural entity. This is not the case, however, because **the Supreme Court has adopted a two-part test to determine if an employee is in fact an agricultural laborer excluded from the NLR**A.23 An agricultural employee will be excluded from the right to organize if he or she is engaged in either primary or secondary farming. The Supreme Court has taken the FLSA definition of agriculture and essentially limited its application based on a strict application of the statutory language. Primary farming are those tasks specifically referred to in the statutory definition of “agriculture” such as “cultivation and tillage of the soil [and] dairying.”24 The rest of the definition is considered secondary farming, and therefore a worker is an agricultural laborer if the work performed is of the type that would be performed “by a farmer or on a farm as an incident to or in conjunction with such farming operations.”25

In one of the more recent cases to address the question of who is considered an agricultural employee, the Supreme Court in Holly Farms Corp. v. N.L.R.B. upheld the determination made by the NLRB that workers on live-haul chicken crews do not engage in agricultural labor and therefore are not subject to the agricultural exception from the NLRA.26 The responsibility of the live-haul crew is to enter the farms of independent contractors who raise chickens supplied by Holly Farms; the chickens are then caught and caged by nine chicken catchers, moved by a forklift operator onto a truck to be transported by a truck driver to the processing plant.27 These live-haul crews were not engaged in primary farming because primary farming would have been the actual raising of the poultry, which was the responsibility of the independent contractors, not the live- haul crews.28

The court then focused on whether these live-haul crews were engaged in secondary farming. In doing so, the court immediately found that that the work performed by the live-haul crews were not of the kind “performed by a farmer” because Holly Farms gave up its farmer status as soon as the chicks were delivered to independent contractors for raising.29 As a result of this determination, the truck drivers were not considered agricultural laborers and were therefore not part of the agricultural exception to the NLRA and were able to unionize.30

The court then looked to whether the chicken catchers and forklift operators were engaged in work “on a farm as an incident to or in conjunction with” raising poultry.31 The Supreme Court found that neither the chicken catchers nor the forklift operators “worked on a farm” because the work these employees performed were part of Holly Farms’ poultry processing operations and was not of the type of work contemplated to be included in the statutory definition of “farming.”32 The Supreme Court adopted the reasoning of the NLRB in deciding that the catchers and forklift operators were not performing work “incident to or in conjunction with” the farming operations of the independent contractors.33 In doing so, the Supreme Court decided that it was more important to look at the status of the employer as a farmer rather than where the laborer carried out the responsibilities of the job he or she was hired to perform. Because, as previously determined, Holly Farms was not considered a farmer by the time the live- haul crews went in to catch the chickens, the catchers and the forklift operators were not engaged in secondary farming as defined in the FLSA.34 This meant that all the members of the live-haul crews were not agricultural laborers and therefore all had the right to organize under the NLRA.

The Supreme Court limited the applicability of the definition of “agriculture” in Holly Farms and in doing so opened up the possibility that more workers employed by large, vertically integrated employers would be able to organize.35 By taking the approach to look at the status of the employer rather than where the work is performed, the Supreme Court broadened the already broad definition of “employee” under the NLRA. More employees working for these vertically integrated employers will be able to experience the protection of the NLRA that has been open to industrial workers since the act was first passed in 1935. The impact of the Holly Farms decision is for courts to engage in an in depth analysis before deciding whether a worker is an agricultural laborer not protected by the NLRA. Switching the focus to the status of the employer rather than where the employees are performing their responsibilities will ensure greater protection for workers and a broader reach of the NLRA.

While the definition of “employee” has expanded to include some employees who are employed by agricultural employers, **there is still the exception for agricultural laborers included in the statute and therefore there are still many workers who are unable to form unions.** These may be the **workers that need the most protection because they are the field workers who are subjected to abuse, poverty and hazardous working conditions.36** Many commentators would like to see **the NLRA extended to include agricultural laborers**. The main advantage to **extending the definition of “employee” to include agricultural laborers under the NLRA is that the statute has been in existence for many years, and most of the challenges that would be brought up with respect to agricultural laborers attempting to unionize have most likely already been resolved in other employment sectors allowing the NLRB and courts to rely on precedent. This will make application of the statue to the agricultural laborers consistent with other employment sectors. Reliance on precedent would lead to predictable outcomes when labor disputes arise.** Agricultural laborers still have a ways to go before they will be able to reap the benefits of the NLRA; but, if this were to happen, **agricultural laborers would be able not only to unionize and have their association protected, but also would have the advantage of being able to rely on others with experience and knowledge of the NLRA and its intricacies**.

## 1AC — Advantages

### Advantage 1 - Yield

#### Farmer’s yield is nearing an all-time low – government support doesn’t help the most needy and isn’t a long term solution

**Farm-Aid, 20,** 9/14/20, “Understanding the Economic Crisis Family Farms are Facing”, 2Farm Aid works with local, regional and national organizations to promote fair farm policies and grassroots organizations coordinating campaigns designed to defend and bolster family farm-centered agriculture. RL: <https://www.farmaid.org/blog/fact-sheet/understanding-economic-crisis-family-farms-are-facing/>, KR

**EVEN BEFORE COVID**-19**, FARM FAMILIES HAD NEGATIVE FARM INCOME**

Things have **been bad in farm country for a while. Between 2013 and 2018, farmers experienced a nearly 50% drop in net farm income as the prices for corn, wheat, dairy, beef and other farm products crashed**. While net farm income rose by 3% in 2019, government payments accounted for all of that increase (namely, via the trade bailout program). Without it, 2019 delivered farmers their second lowest income since 2013.[13]

As for 2020, while the U.S. Department of Agriculture (USDA) is forecasting a $19 billion (or 22.7%) increase in net farm income this **year, government payments like trade bailouts and federal COVID-19 relief programs account for 36% of net farm income** — the highest share since 2001 and the eighth highest share since The Great Depression.[14] Without the $22.4 billion provided in government payments, net farm income in 2020 would be well below the sector’s average from 2000 to 2019.[15] What’s more, the vast majority of payments flowed to the very largest farms. CNBC reports that the top 5% of trade bailout recipients received nearly half of all $28 billion paid in 2018 and 2019.[16]

Perhaps more troubling is USDA’s pre-pandemic data. In February, **USDA forecast** 2020 median farm household income at -$1,840 — **meaning that farm households would lose money from the farm.[17] More recent USDA data suggests a slightly better median income level,[18] presumably from high levels of government payments. But even these sector-wide income numbers likely mask severe distress in many parts of farm country, as many farmers who have been squeezed by years of low income did not benefit from federal payments**. Most farmers rely on off-farm jobs to feed their families, secure health insurance, and keep their farms afloat. Given the pandemic’s broader economic impacts, which arrived after farmers have had to dig into their savings for the better part of the last decade, **droves of farms are at risk of going under in the next year.**

FARM CREDIT CONDITIONS WEAKEN

Farmers rely heavily on credit to buy the seeds, fertilizer, machinery, livestock and other inputs that keep their farms running. Because most farmers require operating loans at the start of each season, a critical aspect of a farm’s financial health relates to its ability to make loan payments on time. Economists utilize various solvency measures to measure this, including the debt-to-asset ratio, debt-to-equity ratio and equity-to-asset ratio. All of these measured weakened for the eighth consecutive year in 2020. **As farm debt continues to rise, the sector’s risk of insolvency in 2020 is at its highest level since 2002**.[19] The following trends reveal weakening credit conditions for farmers and ranchers in today’s strained economy:

**Farmers struggle to make loan payments. Farm loan delinquency rates are rising.** The Federal Reserve Bank of Kansas City, which covers Colorado, Kansas, Missouri, Nebraska, New Mexico, Oklahoma and Wyoming, reports that the volume of delinquent farm real estate and operating loans increased by about 17% and 13%, respectively, over the past year.[20] Meanwhile, the Federal Reserve Bank of Chicago, covering Illinois, Indiana, Iowa, Michigan and Wisconsin, reports the share of farm loans with “major” or “severe” repayment problems is now at 8.3% — a level not seen since 1988.[21]

The 1980s all over again? Pre-COVID-19, total farm debt was estimated to hit a record $425 billion, just shy of the 1981 peak of $440 billion.[22] Since 2014, real estate debt has been rising to historic levels, potentially indicating not just rising land values, but farmers refinancing higher-interest loans or other debt into farm real estate. **In a time of persistently low farm income where farmers are defaulting on loans, this trend places a lot of farmland at risk of liquidation.[23]**

Growing demand for credit: **If farmers can’t secure affordable and timely credit, they face an economic uncertainty that threatens the survival of their farms. Several bankers are reporting growing demand for loans**, yet significant decreases in both the number and the size of agricultural loans in their portfolios.[24]

While economists and lenders note that federal relief has helped farmers navigate these conditions, many remain concerned that **without more intervention, a wave of foreclosures will strike farm country. These conditions are challenging for all farmers, but beginning farmers, smaller and midsized farmers, as well as other disadvantaged farmers in particular continue to struggle.**

#### The aff is key to increase incentives to farm: it increases wages, sets safe living conditions, AND helps farmers expand products

**Reilly, 11**, Penn State Law, “Agricultural Laborers: Their Inability to Unionize Under the National Labor Relations Act”, Penn State: Masters of Science, JD Law, URL: <https://pennstatelaw.psu.edu/_file/aglaw/Publications_Library/Agricultural_Laborers.pdf>, 2011 + since most recent citation is from then, KR

**The rate of pay agricultural laborers earn in return for their work would increase if these workers were able to organize and engage in collective bargaining with their employers.** **Agricultural workers in 2008 made between $8.64 per hour and $13.02 per hou**r.50 The hourly wage is relatively low, especially when **compared to other occupations with the ability to unionize that require similar training and working conditions**. For example**, construction laborers in 2008 earned between $10.80 and $14.95 per hour51 and textile, apparel and furnishing workers earned between $9.14 and $18.15 per hour**.52 While there is a wide range of earnings for anyone entering these three professions, **the two professions that are able to unionize earn more per hour on a national level than the agricultural workers who are exempted form organizing under the NLRA**. The low earnings of agricultural laborers as compared to other laborers supports a finding **that the NLRA would benefit agricultural laborers and are the type of workers that were meant to be extended the right to organize. If agricultural laborers were afforded protection under the NLRA to engage in collective bargaining, the likely result would be that bargaining representatives would be able to negotiate with agricultural employers for higher wages** that would lead to less of an earnings gap between agricultural laborers and laborers in other industries.

There is one major similarity between the construction industry and the agriculture industry that would seem to tip the scales in favor of affording agricultural laborers the right to unionize under the NLRA. **That is that both industries hire seasonally.**53 The seasonal nature of agricultural work is often cited as a reason against unionization, but with the similarity in the construction industry and the ability of those workers to unionize, the seasonal nature of agricultural work should be a factor in considering whether or not to include these workers under the NLRA, but is not itself conclusive. If seasonal workers in other industries are able to unionize, the seasonal nature of agricultural work should not be a major point of opposition to allowing agricultural laborers the right to collectively bargain.

**Agricultural laborers are also subject to harsh conditions because of the work that they perform and should be able to organize under the NLRA in order to bargain with their employers for better working conditions**. Agricultural laborers are **not always provided with access to clean drinking water nor are there typically adequate restroom facilitie**s for these workers to use.**55 Unions can help workers to gain access to sanitary facilities and clean drinking water by bargaining for these necessities with the employers.**56 By making these issues part of **a collective bargaining agreement, unions will be able to hold employers contractually liable to follow such conditions** and will thereby improve the conditions of employment for agricultural laborers who would otherwise be subject to sub-standard facilities.

Another hazardous working condition that arises for agricultural laborers **is the exposure to pesticides.** Agricultural laborers may be exposed to pesticides that are carcinogens or other pesticides that affect the endocrine and/or hormone systems.57 Agricultural laborers, especially those who apply pesticides, are at a greater risk of acute pesticide poisoning which many times is more prevalent than it needs to be because agricultural employers do not take the kinds of precautions necessary to prevent pesticide poisoning.58 **Unions again can aid agricultural laborers by limiting such exposure through a collective bargaining agreement because unions would be able to bargain for certain safety precautions to be taken** before workers are able to spray pesticides and can also ensure that safety gear is provided before spraying commences. Inadequate facilities and pesticides are two examples of the hazardous conditions that agricultural laborers are exposed to that could be cured through the right to unionize and collectively bargain with employers. Unions would be able to protect workers from such sub-standard conditions which in turn would lead to less illness and disease that agricultural laborers would be subjected to and would increase productivity on farms because field workers will not be slowed by sickness and would be able to work more as a result.

Further, “farmers, planters, ranchmen, dairymen, nut or fruit growers” are able to form associations for the mutual benefit of all members.59 These **associations allow their members to work collectively in preparing their products for market**.60 These producers are also able to form cooperatives to market their products and **maintain the “bargaining position of individual farmers” in order to prevent adverse consequences of overcrowding the market**.61 These agricultural producers are free to engage in concerted activity for the mutual protection of the association’s members, but agricultural laborers are exempt from asserting these same rights.62 **Agricultural producers are therefore able to become even stronger entities, further widening the differences in the bargaining positions between producers and agricultural laborers**. The unionization of agricultural laborers would better equalize the bargaining position on each side affording laborers the protections they need against agricultural employers as they become more powerful through associations.

#### 3 Distinct links:

#### 1] Productivity – Wages increase consumer spending AND create economic value

**Jayachandran, 20**, 6/18/2020, New York Times, “How a Raise for Workers Can Be a Win for Everybody”, Seema Jayachandran is an economics professor at Northwestern University, URL:<https://www.nytimes.com/2020/06/18/business/coronavirus-minimum-wage-increase.html>, KR

**Two new studies show that giving pay raises to low-wage workers is good for consumers, too**. That finding could add momentum to efforts to help grocery store clerks, nursing home workers and delivery drivers who are being paid a minimum wage despite their efforts being so essential during the current pandemic. The new research shows that **raising the minimum wage improves workers’ productivity, which translates into businesses offering higher-quality service. Because many customers are willing to pay more when quality improves, a company can raise its prices without losing sales volume. That means that profits need not suffer even though employee salaries increase.**

Moreover, **because companies are getting better performance from workers in return for paying them more, a higher minimum wage does not necessarily lead to fewer jobs. With a more productive work force, more economic value is being created and there is more money to go around**, so a higher paycheck for one person does not imply another person’s loss.

The federal minimum wage of $7.25 an hour has not increased since 2009, though Democrats in the House of Representatives have tried to raise it. State and local governments can set their own minimum wage, provided that it is above the federal rate. For example, Ohio’s minimum wage is $8.70 an hour and New York state’s is $11.80. San Francisco’s is $15.59 an hour.

The two new studies, one focused on nursing homes and the other on department stores, looked at the effects of minimum wage changes made at various levels of government. While they are both still working papers and have not appeared in scholarly journals, they were conducted rigorously, by my estimation, and the evidence they offer deserves consideration in the debate on the minimum wage, particularly during our current health and economic crises.

The nursing home study, by the economist Krista Ruffini, a visiting scholar at the Minnesota Federal Reserve, has direct implications in the current pandemic. The improvements in quality it found may be a very a big deal: They imply fewer medical complications and, perhaps, a longer life for patients.

Ms. Ruffini analyzed hundreds of increases in the minimum wage across the United States from 1990 to 2017. In each case, she compared employment in neighboring counties that suddenly had different minimum wage levels.

Her method expands on a landmark study by David Card, an economist at the University of California, Berkeley, and Alan Krueger, the former presidential adviser and Princeton economist, who found no drop in fast-food employment when New Jersey raised its minimum wage in 1992 above the level paid across the state line in Pennsylvania.

Similarly, Ms. Ruffini found little change in employment levels in nursing homes. Many employees were paid the minimum wage or somewhat more than that. Even in cases of the workers — nursing assistants — who had been paid more than the minimum wage, an increase in that base wage rippled through the labor market and still raised their salaries.

Rivian edges closer to an I.P.O., seeking a valuation above $50 billion.

PG&E says it faces a federal inquiry and $1.15 billion in losses over the Dixie fire.

The Biden administration will publish vaccine mandate rules ‘in the coming days.’

Ms. Ruffini’s most startling finding was that higher minimum wages reduced mortality significantly among nursing home residents. Her research suggests that if every county increased its minimum wage by 10 percent, there could be 15,000 fewer deaths in nursing homes each year, or about a 3 percent reduction.

How did pay increases translate into better patient health and longer lives? It appears that with better pay, jobs in nursing homes became more attractive, so employee turnover decreased. Patients benefited from more continuity in their care.

In addition, **the better paid employees may have simply worked harder, perhaps because they cared more about holding onto their jobs. Economists say they have been paid an “efficiency wage”: Employees become more productive when their wages are higher.**

The higher wage may also have **attracted more skilled or industrious people to the job,** but this seems to account for at most a small portion of the improvements in patient health.

#### Prefer the only empirical study from a country

**Katovich, Maia, 18**, 1-4/2018, “The relation between labor productivity and wages in Brazil:”, Scielo Brazil, University of Wisconsin-Madison, Madison, Wisconsin, Universidade de Campinas, Campinas, São Paulo. URL: <https://www.scielo.br/j/neco/a/QR5hfyMfL9c3gwQSGGcRyHD/?lang=en>, KR

**In Brazil, real wages grew significantly more than did labor productivity between 1996 and 2014**. However, this general trend disguises significant sectoral variations, which can be grouped into four conceptual trends. **Firstly, in the agriculture and commerce sectors, large gains in labor productivity were accompanied by real wage increases and improvements in the quality of employment.** This dynamic was likely due to **a positive interplay between productivity-enhancing market developments (incorporation of new technologies, high levels of investment, exploitation of new consumer markets/agricultural frontiers) and income-enhancing institutional developments** (formalization and minimum wage valorization). In conjunction, these for1ces resulted in productivity gains that outpaced wage growth, leading to declining relative wages in agriculture and commerce (see Appendix A for data on relative wages).

In a second sectoral trend, the construction and real estate and other services sectors enjoyed real wage gains over the 1996-2014 period, despite stagnation in labor productivity. Both sectors offer little natural room for drastic productivity growth through the incorporation of new technologies, investments, or practices. And both were major beneficiaries of institutional interventions such as formalization and valorization of the minimum wage.14 Together, these forces resulted in a sharp rise in relative wage for construction and real estate and other services.

In a third variation of the productivity-wage relationship, both labor productivity and real wages largely stagnated or declined slightly in the industry and transportation sectors. In the case of industry, international competition likely held down wages, while productivity suffered from ongoing processes of deindustrialization. By its nature, the transportation sector offers little room for major productivity gains, while the average wage may have fallen as a result of changing forms of employment relations (i.e., increasing levels of self-employment) and increasing relative costs of transport (Chahad; Cacciamali, 2005). These dynamics explain the moderate decline in relative wages for industry and transportation.

In a fourth and final trend, the financial and information services and public services sectors saw stable or declining levels of labor productivity, accompanied by increasing or stable real wages. Productivity declines in financial and information services were due largely to changes in the Brazilian banking system over the 1998-2004 period. Earnings increases in both sectors may have resulted from persistently high returns to education, growing demand for qualified workers, and high levels of labor organization. As a result, the relative wage rose sharply for these sectors between 1996 and 2014.

It is important to note that all analyses above should be interpreted with caution, due to the difficulty inherent in estimating absolute values of labor productivity for some sectors, particularly public services and real estate. Nevertheless, the values serve to elucidate temporal dynamics of labor productivity within (if not necessarily across) sectors, revealing essential patterns in the productivity-wage relationship.

Estimation of hierarchical wage models using pooled data assessed the main structural and individual determinants of real wages over the sample period. Growth in sector- and state- level labor productivity was significantly positively associated with growth in real wages for all economic sectors from 1996 to 2012. Elasticity between labor productivity and real wages was greatest for sectors where workers’ earnings are often based directly on productivity (real estate, commerce), or where firms can easily measure employees’ productivity (industry). Elasticities appear smaller in sectors where productivity is more difficult for firms to measure, or where there are high levels of minimum wage employment (agriculture, construction) or labor organization (financial and information services).

**In general, productivity’s impact on wages was comparable to the impacts of institutional factors**, particularly worker formalization and minimum wage. Formalization, which primarily impacts labor markets through the enforcement of a minimum wage-floor, exhibited the largest impacts on sectors with high proportions of minimum wage employment. Labor organization had varied effects on wage levels. In sectors with high levels of organization, increases in union-participation exhibited a significantly positive association with wages. In contrast, increases in union-participation in less-organized sectors were negatively associated with wages, perhaps because union activity served to draw earnings away from the larger share of non-unionized workers. Nonetheless, unionization changed little over the sample period and exerted a relatively small impact on hourly wages.

**Wage growth in line with the first sectoral trend (observed in the agriculture and commerce sectors) may be the most sustainable in the long term, in the sense that increased earnings over the 1996 to 2014 period accompanied real gains in labor productivity.** In contrast, rising relative wages in the financial and information services and public services sectors highlight the capacity of labor organization, institutional protections, and skill-biased job polarization to decouple wages from productivity levels. In sum, institutional mechanisms display the capacity to substantially reallocate factor incomes toward workers, but these mechanisms face natural limitations if not accompanied by growth in labor productivity. **Thus, sustainable future wage growth in Brazil will likely depend on positive interplays between market-driven productivity gains and continued institutional interventions.**

#### That drives economic confidence – Increased productivity drives farm growth which creates a chain of investment.

**Wang et. al, 19**, “How Farmers Make Investment Decisions: Evidence from a Farmer Survey in China”, Sustainability, Shuangjin Wang 1, Yuan Tian 2,\*ORCID, Xiaowei Liu 3 and Maggie Foley 4, 1: School of Management, Tianjin University of Commerce, Tianjin 300134, China, 2: School of Economics and Management, Beijing Jiaotong University, Beijing 100044, China, 3: College of Business, St. Ambrose University, Davenport, IA 52803, USA, 4: Davis Business School, Jacksonville University, Jacksonville, FL 32211, USA, URL: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwii17vKue7zAhVdJjQIHUr3D7YQFnoECAUQAQ&url=https%3A%2F%2Fwww.mdpi.com%2F2071-1050%2F12%2F1%2F247%2Fpdf&usg=AOvVaw1RMvM-hGadn_uoetBxebDi>, KR

**A variety of research methods were used in previous research to study farmers’ investment adjustment behavior from different perspectives**. For example, Factor Analysis [3,7], Multinomial Logit Model [8,10,11], Deterministic Discrete Event Model [9], Mixed Logit Model with Flexible Mixing Distribution [12], Tobit Model [13,14], Probit Model [15–17], and Structural Equation Modeling [18,19].

It is widely accepted **that farmers’ investment adjustment behavior is affected by** many factors, but different literature has different opinions on key influencing factors that affect farmers’ investment behavior. Adimassu et al. [20] have found that farmers’ investments are limited by their capabilities. Okello et al. [21] have revealed that **economic benefits, such as higher yields and income, can affect farmers’ investment in seed selection.** Also, the cropped area, scale of the farmland, and agricultural income significantly influence farmers’ willingness to invest [10]. **The government’s support and favorable policies can positively promote the agriculture investment of farmers** [22,23]. Adimassu et al. [2] finds that farmers’ investment behavior is affected by five major factors: households’ resource endowments, knowledge, and experience of farming, access to information, social capital, and availability of family labor.

Moreover, some economic studies focus on specific factors that affect investment choice, such as state subsidies [24], the impact of agricultural cooperatives [25], risk preferences [26,27], the mode of communal land acquisition [28], government policies [29], and the presence of a price floor [13]. Besides, Ullah and Anad [30] examine the factors that influence the level of agricultural mechanization**: economic condition of farmers, the land tenure system, scale of farmland, cost of fuel, and the cost of renting agricultural machinery. Konrad et al. [15] have found that the scale of farm operations, environmental concerns, and innovation readiness are important for farmers’ technology investments.**

Factors such as the effect of planting structure adjustment and the output elasticity of capital can affect the investment adjustment behavior of farmers, and have been investigated by some studies. Ji et al. [31] have found that **the shortage of a labor force can be supplemented by increasing capital input**. In addition, other reasons may also lead to investment adjustment behavior such **as attitudes toward capital input [4], the amount of agricultural income [32], expected financial benefits from capital input [33], and differences in adjustment capabilities [34].**

#### 2] Capital Investment; Boosting wages creates incentive to invest

**Duke, 16,** 9/2/2016, “To Raise Productivity, Let’s Raise Wages”, Center for American Progress, Brendan Duke: Princeton University; MPA in Economic Policy, Macalester; B.A. nin political science, Associate Director for Economic Policy, Senior Policy Analyst for US Congress Joint Economic Committee, URL: <https://www.americanprogress.org/issues/economy/reports/2016/09/02/142040/to-raise-productivity-lets-raise-wages/>, KR

Gordon argues that a key reason **productivity surged during this period was that rising real wages provided an incentive for firms to invest in capital, such as machinery. When labor is cheap, businesses have little incentive to invest in capital because they can always hire another worker on the cheap. But higher wages reduce the price of capital relative to labor, nudging firms to make investments and raise productivity**.

The 1929–1950 increase in wages was at first a result of several policies that directly raised workers’ wages, including the first federal minimum wage, the first federal overtime law, and the National Labor Relations Act, which made it easier for workers to join a union and bargain with their employers. The entry of the United States into World War II further drove investment higher, as the economy converted into what Gordon describes as a “maximum production regime.”

It is striking that during this period of rapid productivity growth, wages for production workers grew even faster than productivity growth did. The current debate about whether a typical worker’s compensation has kept track with the economy’s productivity typically envisions productivity growth as the precondition for wage growth. But Gordon’s research implies that the relationship can go both ways: Not only can productivity growth raise wages, **but higher real wages also can boost productivity growth—the main reason for slow gross domestic product growth—by giving firms a reason to purchase capital.**

Can higher wages raise productivity growth in 2017? Basic economic theory and common sense suggests that **an increase in the price of labor—wages—achieved through higher labor standards will cause firms to invest in more capital, raising the economy’s productivity.**

Some have tried to use this fact to claim that raising wages ultimately will hurt workers by causing them to be replaced with machines. **But automation is just another way of saying productivity growth: Robots replacing humans means more output produced using fewer human hours—the literal definition of higher productivity**. We can either have a productivity problem or an automation problem, but we cannot have both at the same time.

The sharp slowdown in productivity growth today heavily implies that **we currently have too little automation rather than too much**. At the same time, the evidence on policies that raise wages—such as the minimum wage—points to no noticeable effect on employment. Indeed, the New Deal and its rising labor standards were also a period of rapid employment growth.

A more important question is whether we have enough of the other key ingredient for the productivity growth that made the 1930s possible: innovation. Technological change itself is another reason firms purchase new capital—otherwise, investment amounts to “stacking wooden ploughs on top of wooden ploughs.” Gordon makes clear that the 1930s were in fact one of the most innovative decades in history, as the economy began to harness the potential of the internal combustion engine and electrification. **Firms ultimately could afford policies that raised wages because they could raise their productivity with new equipment featuring innovative technology.**

There exists a vigorous debate today about whether we live in a period of very ordinary or extraordinary innovation. Some—such as Gordon himself—argue that productivity growth inevitably will be slower because today’s new technology is inherently less innovative than that of the 1930s. In that case, there still exists a strong justification for raising labor standards: **Slow productivity growth makes it that much more important that its fruits be shared equitably.**

But others—including Andrew McAfee and Erik Brynjolfsson of the Massachusetts Institute of Technology, the country’s leading growth optimists—argue that we live in a period of extraordinary technological change. Even so, recent innovations—such as 3-D printing and social media—have failed to raise productivity growth, even after accounting for the possible problems with how statistics measure it. Therefore, it **may be the ability of firms to hire workers at wages that have barely grown since 2000—rather than purchasing new equipment and adopting new technology—that has prevented productivity from rising.**

The truth likely falls somewhere in between the pessimists and the optimists, with healthy—if not necessarily explosive—productivity growth possible. In that case, **policies that raise wages may be the key to unlocking productivity growth by increasing incentives for firms to invest in capital. Such wage-raising policies include making it easier for workers to bargain collectively, raising the federal minimum wage, and modernizing overtime rules**. Fortunately, the Obama administration recently has taken action on the latter and proposed an increase in the overtime threshold to $47,000 per year.

#### 3] Working conditions – squo legislation allows for loss of rights but only unions and the right to strike solve

**Apha, 17**, 11/7/17, “Improving Working Conditions for U.S. Farmworkers and Food Production Workers”, American Public Health Association, The American Public Health Association (APHA) is a Washington, D.C.-based professional organization for public health professionals in the United States., URL: <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2018/01/18/improving-working-conditions>, KR

**More than 4 million workers in the United States are directly involved in tending crops and livestock, picking and packaging produce, and slaughtering and processing meat, poultry, and seafood.[1] These individuals, referred to throughout this policy statement as farmworkers and food production workers, are essential to meeting the public health goal of ensuring an accessible supply of nutritious food.** Yet, in the case of many of these workers, their job adversely affects their health. **Most are paid low wages, and they suffer high rates of work-related fatalities and injuries. Many face discrimination and exploitation because of their race, ethnicity, and/or immigration status, and some are excluded altogether from certain labor law protections. Currently, working conditions for farmworkers and food production workers contribute to health disparities.** As expressed in APHA policies, **a sustainable food system must be grounded in safe working conditions, fair wages, and human rights protections** for individuals employed in agriculture and food production.

Fatality, injury, and illness rates: **Workers employed in food production jobs are exposed to a wide range of serious hazards**. For example, workers on dairy farms and in hog growing operations are at risk of being injured by charging or **kicking animals and by contact with heavy machinery[**2], workers who handle livestock and poultry are at increased risk of **zoonotic diseases**[3], and those who tend and harvest crops often suffer heat-related illness,[4] pesticide poisoning,[5**] and chronic back and shoulder injuries** from bending, reaching, and lifting.[6] Workers employed in seafood, poultry, pork, and beef slaughtering and packaging suffer **from lacerations and amputations**, infections and exposure to antibiotic-resistant pathogens,[7,8] and musculoskeletal disorders caused by intense repetitive work.[9,10] Exposure to such hazards results in **high injury and fatality** rates among U.S. workers employed in these industries.

**The rate of fatal work-related injuries among agricultural workers is seven times higher than the rate among workers overall and two times higher than that for construction workers** and those employed in the mining industry.[11,12] In addition, the rate of nonfatal work-related injuries is significantly higher among workers in food production jobs, particularly with respect to incidents requiring days away from work or restricted duty (DART).[11] The meatpacking and poultry industries rank among the U.S. industries with the highest rates of work-related injuries and illnesses, with DART rates in these industry sectors at 7.8 per 100 workers and 4.6 per 100 workers, respectively, as compared with the national rate of 1.7.

**Work-related injuries, illnesses, and disability are costly to businesses, communities, governments, workers, and workers’ families**. The annual cost of work-related injuries, illnesses, and fatalities in the United States, including productivity losses, is **estimated to be $250 billion**. With workers’ compensation covering less than 25% of these costs, **all members of society share the burden**.[13] As a result, families and **taxpayers subsidize the majority of the lost income** and medical care costs generated by work-related injuries and illnesses.[14]

Economic insecurity: **Income is a critical social determinant of health. It affects individuals’ and families’ ability to meet the basic needs of safe housing, food, child care, transportation, and health care**.[15] The hourly wage for meat, poultry, and fish processing workers ranges from $9 to $16, with 50% of the individuals employed in these occupations earning less than $25,000 per year.[16] In 2013–2014, the average wage reported by farmworkers was $9.71 per hour. Thirty percent of farmworkers had family incomes below the federal poverty level.[17]

Depending on the industry sector, the size of the employer, and the presence of a union, some food production workers have access to employer-provided health insurance and paid sick leave, **but many do not**. In 2014, for example, **only 22% of farmworkers reported having health insurance**. Although most workers employed by the major U.S. meat and poultry processing firms are provided health insurance, most do not have the benefit of paid sick leave.[18,19]

Workers in certain agricultural jobs are paid according to the amount of product harvested. This system may result in a higher weekly wage for some, but it encourages an intense pace of work that involves repetitive tasks, heavy loads, and other risk factors for injuries.[20] For instance, one study showed that Latina farmworkers who were employed under piece-rate contracts were five times more likely to report an injury than those who did not work in a piece-rate system.[21] **The piece-rate system fosters discriminatory practices and inequalit**y[22] and **can be abused by employers and supervisors to defraud workers of the wages they are due**.[23] Farmworkers consistently report that the only way to increase and ensure the use of safety equipment will be switching from the piece-rate system to an hourly wage rate.[19]

Jobs with low wages and the lack of employer-provided health insurance and paid leave put a strain on social safety net programs.[24] In a Labor Department survey of agricultural workers, only 14% reported having employer-sponsored health insurance, while 37% reported that their family used government-provided health insurance.[16]

Exclusion from labor protections**: There is a long history of agricultural jobs in the United States being excluded from labor protections**, including Occupational Safety and Health Administration (OSHA) standards, minimum wage and overtime protections, collective bargaining rights, and workers’ compensation insurance.[25] For more than four decades, Congress, through its annual appropriations process, has specifically prohibited OSHA from enforcing any regulations targeting farming operations that employ 10 or fewer workers. Of the more than 100 safety and health regulations adopted by OSHA, only six address hazards specific to agriculture. Moreover, despite high injury and fatality rates among farmworkers, at least 15 states do not require agricultural employers to carry workers’ compensation insurance.[26]

Regulatory protection of agricultural workers from pesticide exposures is the responsibility of the U.S. Environmental Protection Agency (EPA). The EPA’s Worker Protection Standard (WPS) is one of the few occupational health and safety regulations administered by the agency and its designated state regulatory agencies. The EPA revised and strengthened the WPS in 2015 in an effort to achieve parity in regulatory protection for agricultural workers, requiring annual pesticide safety training, notification of pesticide applications, use of personal protective equipment, restricted-entry intervals after pesticide applications, decontamination supplies, and emergency medical assistance. The standard also prohibits pesticide application and early reentry by workers younger than 18 years. In January 2017, EPA published a separate regulation, the Certification of Pesticide Applicators, to improve protections for those who handle, mix, and apply restricted-use pesticides. However, the EPA announced a delay in the effective date for the regulation, influenced perhaps by opposition from some grower organizations, regulators, and pesticide registrants (although this is being contested in court).

**Discrimination and exploitation**: Agricultural and food production employers rely heavily on immigrants and people of color for their workforce.[27–29] Eighty percent of farmworkers in 2014 self-identified as Hispanic, with about two thirds reporting being born in Mexico. These workers are largely non–English speaking, and nearly half are not authorized to work in the United States.[16,30]

**More than 50% of the U.S. dairy workforce is made up of immigrants and refugees**.[31] In the top two U.S. dairy-producing states, New York and Wisconsin, more than 75% of dairy workers are from Mexico or Guatemala.[32] In meatpacking and poultry processing, 34% of the workforce is Hispanic, which is more than twice the share of Hispanics in the overall workforce.[33] Refugees from Somalia, Burma, Egypt, and elsewhere are also often employed at meat and poultry plants.[34,35] More than 60% of workers involved in seafood processing, including fish trimming, crab picking, and seafood canning, are foreign-born individuals,[36] including Asian/Pacific Islanders and immigrants from Vietnam, the Philippines, and the Marshall Islands.

Some farmworkers and food production workers are authorized for employment in the United States under the H-2A and H-2B visa programs (these individuals are referred to as “guest workers”). Historically**, the jobs covered through these programs have involved laborers tending to and picking crops, but employers in the seafood, poultry, beef, pork, and dairy industries also rely on the programs. As a result of their low wages and harsh working conditions, these jobs are inferior to those held by individuals with other employment option**s.[37] Because guest workers are tied to a specific employer, they do not have the ability to change jobs if they are mistreated. Investigations by government agencies, journalists, and human rights groups have shown that many individuals with H-2A and H-2B visas are exploited by their employers.[38]

Workers in agricultural and food production occupations are at risk of depressive symptoms and other behavioral health disorders because of low job control and high job strain.[39,40] The high levels of economic stress and employment insecurity they face also have implications for their mental health.[41,42]

**Unions serve as a mechanism for workers to negotiate with employers to provide livable wages, health benefits, and safe working conditions. Unions have a positive effect on both unionized workers and non-union workers with respect to wages, fringe benefits, pay inequality, and working conditions**.[43] The United Nations Universal Declaration of Human Rights maintains that “everyone has the right to form and to join trade unions for the protection of his interests.” **U.S. farmworkers, however, are excluded from the National Labor Relations Act, and thus it is nearly impossible for them to bargain with employers about working conditions**. There are certain exceptions (e.g., California, Oregon, Washington) where state laws allow those working in agriculture to unionize. **Lack of union representation and protection can result in vulnerable workers remaining silent in the face of exploitation and continuing to work in unsafe conditions**.

#### Increasing working conditions key for increased yields and output

**Billikopf, 06**, 8/11, UC Berkeley, “Managing People on the Farm”, Gregorio Billikopf worked as a Labor Management Farm Advisor with the University of California from 1981 to 2014 (and is now Emeritus). URL: <https://nature.berkeley.edu/ucce50/ag-labor/7labor/01.htm>, KR

To effectively manage a labor force, **an employer must be concerned about productivity and also about people**. **Some farmers are always looking for ways to improve production and ensure the long-term viability of the business**. Others operate deteriorated farms and seem to have little interest in increasing yield or in recycling profits into the operation. **A manager’s attitude toward farm productivity, especially toward product quality, can strongly influence worker output. Performance is often enhanced when employees believe they are contributing to a valuable product** and are part of an effective team.

The connection between employee productivity and farm profitability is direct and obvious. Not as apparent, but just as vital, **is the association between concern for worker needs and profitability**. How employees’ needs are met has a direct bearing on their performance. Focusing on productivity alone may lead to a reduction in worker output.

**A concern for worker needs means attending to their well-being, as both individuals and employees**. Courteous and consistent treatment, job security, fair pay, and safe working conditions are important to employees. **When those needs are ignored, worker dissatisfaction may impede productivity**. One disenchanted employee explained, "When I first worked here, I really exerted myself. But now I try to do as little as I can and still keep my job." Another put it this way, "I’ve learned to give my job the time it deserves, but I no longer give any more of my own time. I’ve been burnt by doing so." A third worker confided, "When I’m mad at the supervisor, I do exactly what she asks me to do ... even if I know a better way of doing something or have a good reason not to do the job her way."

Trust is another important contributor to productivity. Trust builds gradually, as managers and employees learn they can count on each other. Even after workers’ trust has been won, management must continually nurture such trust if they are to retain it. The flow of trust cannot be turned on and off like irrigation water.

Management generally expects personnel to (1) consistently produce high quality work on a timely basis; (2) take their responsibilities seriously, at times even going beyond the call of duty; (3) show concern for the welfare of the farming operation and for other employees; and (4) represent the farming enterprise well within the community.

**Employees hope, in turn, that management will (1) value their feelings and opinions; (2) provide positive feedback for work well done; (3) meet the agreed-upon terms and conditions of employment; (4) be consistent and courteous;** and (5) provide a work environment where they can develop their potential over time (in terms of skills and earnings).

Understanding Labor Management

Effective labor management demands a clear understanding of its principles and familiarity with its tools. Managers deal with a complex web of interrelated elements. For instance, the wage scale advertised may affect the quality of applicants you recruit; the qualifications of those ultimately hired will in turn determine the amount of on-the-job training needed.

People mistakes may be quite costly. A new worker on a kiwifruit plantation fertilized too close to the plants with a highly concentrated formulation that burned the foliage. Many plants died. The quality of the fruit that did grow was so poor as to be unmarketable through normal channels. Yet another worker mistakenly milked a penicillin-treated cow into the main tank. The good milk in the bulk tank was contaminated and all of it had to be discarded.

These blunders could have been avoided by selecting knowledgeable, skilled personnel, or by providing better orientation, training, management and supervision. Tapping motivation, building effective personal relationships, establishing and carrying out a constructive disciplinary process, and encouraging worker input in decision making are all part of labor management.

There are a number of options available for solving people problems. If we are comfortable using only a few management tools, we may be limited in our response to a challenge. Some, for instance, attempt to use training to solve most any adversity, such as tardiness, misuse of tools, and conflict on the job, whereas others believe that most every difficulty can be solved with pay.

There is a difference between a mistake and a purposeful error. In one vineyard the vines were planted upside down under the direction of an inexperienced supervisor. The ranch manager discovered the error the following spring, when the vines failed to bud out.1 The supervisor’s mistake hurt them not only in terms of lost vine cuttings, but also a year of valuable vineyard development. Until recently, I thought this was just a mistake. A horrible one, granted, but nevertheless human blunder. That is, until I received the following note from a grape grower who had read the above narrative:

"Years ago [when] we were planting our vineyard, the Hispanic supervisor (within the farm labor contractor crew) was imparting his wisdom about crew management. He spoke about their last job at another farming community. Apparently the owner had come out to rant and rave and suggest that the men were slow and stupid. This supervisor told me how he gave that grower the expected humble response of sí (i.e., yes) and then quietly fulfilled the angry growers expectations. At the first moment the owner's back was turned the Hispanic supervisor gained the already watchful crew's eyes; then proceeded to invert a cutting and insert it into the ground. Without a word the entire crew followed his lead and planted the rest of the vineyard with the cuttings upside down. He continued his tale: That grower would have no idea what happened until next year ... and if confronted [the Hispanic supervisor] would just explain that he didn't understand English very well and thought that the grower wanted them to plant those vines the other way ... how was he supposed to know?"2

A clear understanding of management tools includes the proper application of the same. One orchardist, after learning of a neighbor’s success with an incentive program switched his pay system. The peach grower offered crew pickers a full day’s pay—and the right to leave as soon as they finished—if they would pick an additional bin for the day. The pickers were delighted. Most were through before 11 a.m. The farmer was thrilled with the increased productivity. But after the initial excitement wore off he started to feel that the bargain was not so good. He tried to even out matters by asking for yet one more bin per day. The workers, who may have originally accepted the extra bin as a fair exchange, now instead voted for union representation. Crew workers felt the farmer had broken an oral contract.

When labor management principles are properly understood, the more likely a manager will choose the right set of tools—and apply them correctly—to deal with a given challenge. Time and effort spent on improving management competence pays off. Once the foundation is laid, new skills are easier to acquire. Also, tools developed for use in one area may serve well in others. For example, a detailed job analysis may be used during the selection process. The same analysis may yield data to establish pay differences, fix performance parameters, and help tailor a training program.

An overview of human resource management is presented in Table 1-1. The list in the left column shows external constraints that are placed on the workplace, the center column lists labor management tools and practices, and the column to the right lists potential results or outcomes.

<table cut because of weird formatting issues>

I like to think of the tools in the middle column as filters or magnifiers affecting the results column. In the absence of effective human resource management practices (the middle column), external influences may have a pronounced effect on productivity and other sought after results. For instance, an employer might choose to hire the first twenty applicants who show up for a citrus-picking job without testing their skills. By so doing she forgoes the opportunity to use a selection filter to hire more productive workers.

Let’s briefly examine the elements within these three columns before moving on to the importance of purposeful action.

External influences and constraints

Tradition represents the way things have been done in the past. Some traditions ensure stability. Others may reduce creativity.

Competitors. The techniques used by competitors can influence farm practices. Like tradition, competitors may provide a positive or negative influence.

Laws at the federal, state, province, municipality, or other local level regulate almost every aspect of labor management. When well thought out, such laws can extend important protections and benefits to a large number of workers. **Many laws have been passed without sufficient study, however, and the time spent in compliance can be onerous**. Unfortunately, some believe that simply following the law will guarantee that they are managing properly. This book is intended for an international audience, and is focused on effective human resource management practices, more than on what is legal or not. Because laws do change frequently and are so different from one nation to another, make sure to always consult with a qualified local labor attorney before implementing the suggestions found here.

The labor market generally deals with relationships between the supply and demand of workers on the one hand and with wages on the other. Generally, a shortage of workers will drive wages up.

Technology. Labor law constraints and potentially unpredictable labor markets tend to encourage mechanization. Technology may change the nature and number of jobs but is unlikely to diminish the importance of labor.

**Union contracts. Agricultural enterprise managers desire freedom to manage, while unions want to restrain possible abuses of such freedom. Furthermore, unions often fight to improve economic outcomes for employees (wages and benefits). Beside issues of economics, unions also attempt to protect worker dignity and improve working conditions. Unions may give employees a greater voice in some types of decision-making**. The opposite can also be true. Perhaps the single most important predictor of unionization is the quality (or lack of) two-way communications between management and employxsees. **One poor supervisor can have a negative effect on the whole organization.** Other factors4 that may also play a key role on whether employees will join a union include: (1) perceived costs for joining vs. expected returns (e.g., cost of union dues vs. increases in pay), (2) personal feelings towards unionization (e.g., workers who identify with management, prefer merit over seniority, and value individual initiative are less likely to want to join a union), and (3) feelings toward a particular workplace and a particular union.

#### Increasing yield prevents food shortages and nutrient deficiencies

**Tian et al 21**-- Tian, Zhixi [principal investigator, Institute of Genetics and Developmental Biology and former research geneticist at Purdue], et al. "Designing future crops: challenges and strategies for sustainable agriculture." The Plant Journal 105.5 (2021): 1165-1178. (AG DebateDrills)

The first straightforward strategy for designing future crops that meet sustainable agriculture requirements is to improve the following aspects of current well-cultivated crops. **Increasing yield. It is estimated that the yields of major crops need to increase at a rate of 2.4% per year to meet the food supply demand by 2050. However, the current growth rates of the four major crops, maize (Zea mays), rice (Oryza sativa), wheat (Triticum aestivum), and soybeans (Glycine max), are only approximately half of this anticipated rate (Ray et al., 2013).** The development of new varieties with high yield potential that can fill this gap is the foremost mission of the Future Crops Design project. **In fact, in a trial, it was reported that a super-high-yield rice variety could produce one- to threefold more grains under optimal conditions than in normal paddy fields (Liu et al., 2020a). Improving nutritional quality.** Although the amount of food supply has been significantly improved in the last half-century, changes in human lifestyle and food consumption have resulted in a phenomenon called hidden hunger (Nair et al., 2016). For instance, in sub-Saharan Africa and America, about 17–30% of children under the age of 5 years have an inadequate daily intake of Vitamin A (Harjes et al., 2008; Haskell, 2012). **It has been reported that about two billion people are suffering from a chronic deficiency of micronutrients (WHO, 2008), a new threat to human health.** Moreover, the incidence of type-2 diabetes, obesity and colon disease has markedly increased in the past decade (Zhou et al., 2016). **Hence, the second mission of the Future Crops Design project is to generate crops with higher/balanced nutritional quality or specialized metabolites using metabolic engineering and synthetic biology approaches** (Francis et al., 2017; Martin and Li, 2017; Sweetlove et al., 2017; Vasconcelos et al., 2017). **Increasing agricultural resource use efficiency. It was reported that ~17% of arable land has lost productivity since 1945 due to inappropriate agriculture management** (Oldeman, 1994). In fact, nutrient-use efficiencies of today’s crops only reach 30–50% for nitrogen fertilizer (Cassman et al., 2002) and ~45% for phosphorus fertilizer (Smil, 2000). Moreover, fresh water has become a limiting factor for agriculture in many areas in the world. It is estimated that about 2800 km3 of fresh water per year is used for agricultural irrigation, and that crop production decreases by ~20% without irrigation (Siebert and Doll, 2010). **Therefore, to reduce agricultural inputs and environmental burdens, we should aim to develop high nutrient and water-use efficiency crops without yield penalty.**

#### 2 scenarios for extinction:

#### 1] Food shortages cause messed up interventions that destroy biodiversity

**Tian et al 21**-- Tian, Zhixi [principal investigator, Institute of Genetics and Developmental Biology and former research geneticist at Purdue], et al. "Designing future crops: challenges and strategies for sustainable agriculture." The Plant Journal 105.5 (2021): 1165-1178. (AG DebateDrills)

From the perspective of human evolution, each period of rapid population growth, such as during the Neolithic agricultural revolution, which began at about 8000 BC, the hydro agricultural or irrigation revolutions in the Near East, which began about 3000 BC, and the medieval and modern agricultural periods, which began about 1000 AD, benefited from an advance in agriculture (Taiz, 2013; Wallace et al., 2018). The recent rapid population growth during the past 300 years, in contrast, mainly resulted from the Industrial Revolution, which began in Britain about 1760. **The Industrial Revolution greatly increased the range of human activities and accelerated farmland expansion. In 1700, it was reported that nearly 95% of Earth’s ice-free land consisted of wildlands and semi-natural anthromes; however, by 2000, ~55% of these regions were used as arable land** (Figure 1a, data from https://ourworldindata.org/). The Industrial Revolution also gave birth to new technologies and production systems in agriculture, such as the application of larger irrigation systems, and more fertilizers and pesticides. In the 1960s, semi-dwarf wheat and rice varieties were introduced. These semi-dwarf crops exhibit beneficial characteristics, such as improved response to fertilizer input, lodging resistance and enhanced light utilization (Hedden, 2003; Wallace et al., 2018). Along with the fertilizers, pesticides and irrigation systems made possible by the Industrial Revolution, semi-dwarf crops were quickly adopted and resulted in a significant increase in total grain production globally. This big leap in agriculture was known as the ‘Green Revolution’ (Khush, 2001). Indeed, statistical data have revealed that the average daily food supply per person (in terms of calories) has doubled since the middle of the 19th century (Figure 1b, data from https://ourworld indata.org/). It is estimated that the world population will rise to more than 9 billion by 2050 (Alexandratos, 1999; Cassman, 1999), and at that time we will need at least 60% more food than is consumed by humans today. Moreover, our population will continuously increase, reaching over 11 billion by 2100 (Figure 1a, data from https://ourworldindata.org/). **How to feed the increasing population is a challenge facing the whole world** (Tilman et al., 2001; Godfray et al., 2010; Foley et al., 2011; Wallace et al., 2018). **A simple solution to feed a population of 9 billion is to constantly turn wild habitats into farmland**. However, this type of expansion is unrealistic as most of the world’s icefree and non-barren land area has been exhausted, and much of the rest is unlikely to sustain high yields (Cassman, 1999). More importantly, intact forests have been known to play essential roles in protecting the environment, such as storing fresh water, decreasing flooding and regenerating fertile soils. **Clearing of forests will result in prohibitive ecological costs, such as loss of biodiversity and greenhouse gas emissions. It was reported that, due to agriculture expansion, ~30% of all plant species will become extinct** (Taiz, 2013). The destruction of tropical forests releases about 1.1 9 1012 tons of carbon per year, which accounts for 12% of total anthropogenic CO2 emissions (Friedlingstein et al., 2010).

#### Biodiversity loss causes extinction

**Torres 16** [Phil Biologist, conservationist, science advocate & educator. 2 years based in Amazon rainforest, now exploring science around the world. “[Biodiversity Loss: An Existential Risk Comparable to Climate Change](http://futureoflife.org/2016/05/20/biodiversity-loss/)” <http://futureoflife.org/2016/05/20/biodiversity-loss/>.]

According to the Bulletin of Atomic Scientists, the two greatest existential threats to human civilization stem from climate change and nuclear weapons. Both pose clear and present dangers to the perpetuation of our species, and the increasingly dire climate situation and nuclear arsenal modernizations in the United States and Russia were the most significant reasons why the Bulletin [decided](http://thebulletin.org/press-release/doomsday-clock-hands-remain-unchanged-despite-iran-deal-and-paris-talks9122) to keep the Doomsday Clock set at three minutes before midnight earlier this year.

But there is another existential threat that the Bulletin overlooked in its Doomsday Clock announcement: biodiversity loss. This phenomenon is often identified as one of the many consequences of climate change, and this is of course correct. But **biodiversity loss is also a contributing factor behind climate change**. For example, deforestation in the Amazon rainforest and elsewhere reduces the amount of carbon dioxide removed from the atmosphere by plants, a natural process that mitigates the effects of climate change. So **the causal relation between climate change and biodiversity loss is bidirectional.**

Furthermore, there are myriad phenomena that are driving biodiversity loss in addition to climate change. Other causes include ecosystem fragmentation, invasive species, pollution, oxygen depletion caused by fertilizers running off into ponds and streams, overfishing, human overpopulation, and overconsumption. All of these phenomena have a direct impact on the health of the biosphere, and all would conceivably persist even if the problem of climate change were somehow immediately solved.

Such considerations warrant decoupling biodiversity loss from climate change, because the former has been consistently subsumed by the latter as a mere effect. Biodiversity loss is a distinct environmental crisis with its own unique syndrome of causes, consequences, and solutions—such as restoring habitats, creating protected areas (“biodiversity parks”), and practicing sustainable agriculture.

Deforestation of the Amazon rainforest decreases natural mitigation of CO2 and destroys the habitats of many endangered species.

The sixth extinction.

The repercussions of biodiversity loss are potentially as severe as those anticipated from climate change, or even a nuclear conflict. For example, according to a 2015 [study](http://www.ncbi.nlm.nih.gov/pubmed/26601195) published in Science Advances, **the best available evidence reveals “an exceptionally rapid loss of biodiversity over the last few centuries, indicating that a sixth mass extinction is already under way.”** This conclusion holds, even on the most optimistic assumptions about the background rate of species losses and the current rate of vertebrate extinctions. The group classified as “vertebrates” includes mammals, birds, reptiles, fish, and all other creatures with a backbone.

The article argues that, using its conservative figures, the average loss of vertebrate species was 100 times higher in the past century relative to the background rate of extinction. (Other scientists have suggested that the current extinction rate could be as much as 10,000 times higher than normal.) As the authors write, “The evidence is incontrovertible that recent extinction rates are unprecedented in human history and highly unusual in Earth’s history.” Perhaps the term “Big Six” should enter the popular lexicon—to add the current extinction to the previous “Big Five,” the last of which wiped out the dinosaurs 66 million years ago.

But the concept of biodiversity encompasses more than just the total number of species on the planet. It also refers to the size of different populations of species. With respect to this phenomenon, multiple studies have confirmed that wild populations around the world are dwindling and disappearing at an alarming rate. For example, the 2010 [Global Biodiversity Outlook](https://www.cbd.int/gbo3) report found that the population of wild vertebrates living in the tropics dropped by 59 percent between 1970 and 2006.

The report also found that the population of farmland birds in Europe has dropped by 50 percent since 1980; bird populations in the grasslands of North America declined by almost 40 percent between 1968 and 2003; and the population of birds in North American arid lands has fallen by almost 30 percent since the 1960s. Similarly, 42 percent of all amphibian species (a type of vertebrate that is sometimes called an “ecological indicator”) are undergoing population declines, and 23 percent of all plant species “are estimated to be threatened with extinction.” [Other studies](http://commondreams.org/views/2016/02/10/biodiversity-loss-and-doomsday-clock-invisible-disaster-almost-no-one-talking-about) have found that some 20 percent of all reptile species, 48 percent of the world’s primates, and 50 percent of freshwater turtles are threatened. Underwater, about 10 percent of all coral reefs are now dead, and another 60 percent are in danger of dying.

Consistent with these data, the 2014 [Living Planet Report](http://bit.ly/1ssxx5m) shows that the global population of wild vertebrates dropped by 52 percent in only four decades—from 1970 to 2010. While biologists often avoid projecting historical trends into the future because of the complexity of ecological systems, it’s tempting to extrapolate this figure to, say, the year 2050, which is four decades from 2010. As it happens, a 2006[study](http://science.sciencemag.org/content/314/5800/787) published in Science does precisely this: It projects past trends of marine biodiversity loss into the 21st century, concluding that, unless significant changes are made to patterns of human activity, there will be virtually no more wild-caught seafood by 2048.

48% of the world’s primates are threatened with extinction.

Catastrophic consequences for civilization.

**The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point.** According to a 2012 [paper](http://www.nature.com/nature/journal/v486/n7401/full/nature11018.html) published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization.

As the authors write, **a planetary-scale transition could precipitate** “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination**. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive.**

**Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors.** Indeed, it could even fuel the rise of terrorism. (After all, climate change has been [linked](http://thebulletin.org/climate-change-and-syrian-uprising) to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary [Chuck Hagel](http://www.defense.gov/News-Article-View/Article/603441)and CIA director [John Brennan](http://www.cnsnews.com/news/article/cnsnewscom-staff/cia-director-cites-impact-climate-change-deeper-cause-global), have affirmed that climate change and terrorism are connected.)

The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime.

The unavoidable conclusion is that **biodiversity loss constitutes an existential threat** in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.

## Util

#### The standard is maximizing expected wellbeing.

#### Prefer it:

#### 1] Actor specificity:

#### A] Aggregation – every policy benefits some and harms others, which also means side constraints freeze action.

#### B] No act-omission distinction – choosing to omit is an act itself – governments decide not to act which means being presented with the aff creates a choice between two actions, neither of which is an omission

#### C] No intent-foresight distinction – If we foresee a consequence, then it becomes part of our deliberation which makes it intrinsic to our action since we intend it to happen

o/w

#### 2] Lexical pre-requisite: threats to bodily security preclude the ability for moral actors to effectively act upon other moral theories since they are in a constant state of crisis that inhibits the ideal moral conditions which other theories presuppose

#### 3] Only consequentialism explains degrees of wrongness—if I break a promise to meet up for lunch, that is not as bad as breaking a promise to take a dying person to the hospital. Only the consequences of breaking the promise explain why the second one is much worse than the first. Intuitions outweigh—they’re the foundational basis for any argument and theories that contradict our intuitions are most likely false even if we can’t deductively determine why.

#### 3] Substitutability—only consequentialism explains necessary enablers.

**Sinnott-Armstrong 92** [Walter, professor of practical ethics. “An Argument for Consequentialism” Dartmouth College Philosophical Perspectives. 1992.]

**A moral reason to do an act is consequential if and only if the reason depends only on the consequences of either doing the act or not doing the act.** For example, a moral reason not to hit someone is that this will hurt her or him. A moral reason to turn your car to the left might be that, if you do not do so, you will run over and kill someone. A moral reason to feed a starving child is that the child will lose important mental or physical abilities if you do not feed it. All such reasons are consequential reasons. All other moral reasons are non-consequential. Thus, **a moral reason** to do an act **is non-consequential if** and only if **the reason depends even partly on some property that the act has independently of its consequences. For example, an act can be a lie regardless of what happens as a result of the lie** (since some lies are not believed), and some moral theories claim that that property of being a lie provides amoral reason not to tell a lie regardless of the consequences of this lie. Similarly, the fact that an act fulfills a promise is often seen as a moral reason to do the act, even though the act has that property of fulfilling a promise independently ofits consequences. All such moral reasons are non-consequential. In order to avoid so many negations, I will also call them 'deontological'. This distinction would not make sense if we did not restrict the notion of consequences. If I promise to mow the lawn, then one consequence of my mowing might seem to be that my promise is fulfilled. One way to avoid this problem is to specify that the consequences of an act must be distinct from the act itself. My act of fulfilling my promise and my act of mowing are not distinct, because they are done by the same bodily movements.10 Thus, my fulfilling my promise is not a consequence of my mowing. A consequence of an act need not be later in time than the act, since causation can be simultaneous, but the consequence must at least be different from the act. Even with this clarification, it is still hard to classify some moral reasons as consequential or deontological,11 but I will stick to examples that are clear. In accordance with this distinction between kinds of moral reasons, I can now distinguish different kinds of moral theories. I will say that **a moral theory is consequentialist if and only if it implies that all basic moral reasons are consequential. A moral theory is then non-consequentialist or deontological if it includes any basic moral reasons which are not consequential**. 5. Against Deontology So defined, the class of deontological moral theories is very large and diverse. This makes it hard to say anything in general about it. Nonetheless, I will argue that no deontological moral theory can explain why moral substitutability holds. My argument applies to all deontological theories because it depends only on what is common to them all, namely, the claim that some basic moral reasons are not consequential. Some deontological theories allow very many weighty moral reasons that are consequential, and these theories might be able to explain why moral substitutability holds for some of their moral reasons: the consequential ones. But even these theories cannot explain why moral substitutability holds for all moral reasons, including the non-consequential reasons that make the theory deontological. The failure of deontological moral theories to explain moral substitutability in the very cases that make them deontological is a reason to reject all deontological moral theories. I cannot discuss every deontological moral theory, so I will discuss only a few paradigm examples and show why they cannot explain moral substitutability. After this, I will argue that similar problems are bound to arise for all other deontological theories by their very nature. The simplest deontological theory is the pluralistic intuitionism of Prichard and Ross. Ross writes that, when someone promises to do something, 'This we consider obligatory in its own nature, just because it is a fulfillment of a promise, and not because of its consequences.'12 Such deontologists claim in effect that, **if I promise to mow the grass, there is a moral reason for me to mow the grass, and this moral reason is constituted by the fact that mowing the grass fulfills my promise.** This reason exists regardless of the consequences of mowing the grass, even though it might be overridden by certain bad consequences. **However**, if this is why I have a moral reason to mow the grass, then, even **if I cannot mow the grass without starting my mower, and starting the mower would enable me to mow the grass, it still would not follow that I have any moral reason to start my mower, since I did not promise to start my mower**, and starting my mower does not fulfill my promise. Thus, **a moral theory cannot explain** moral **substitutability if it claims that properties** like this **provide moral reasons.**

#### Extinction is a distinct phenomenon that requires prior consideration

**Burke et al 16** Associate Professor of International and Political Studies @ UNSW, Australia, 2016 (Anthony, Stefanie Fishel is Assistant Professor, Department of Gender and Race Studies at the University of Alabama, Audra Mitchell is CIGI Chair in Global Governance and Ethics at the Balsillie School of International Affairs, Simon Dalby is CIGI Chair in the Political Economy of Climate Change at the Balsillie School of International Affairs, and, Daniel J. Levine is Assistant Professor of Political Science at the University of Alabama, “Planet Politics: Manifesto from the End of IR,” Millennium: Journal of International Studies 1–25)

8. Global ethics must respond to mass extinction. In late 2014, the Worldwide Fund for Nature reported a startling statistic: according to their global study, 52% of species had gone extinct between 1970 and 2010.60 This is not news: for three decades, conservation biologists have been warning of a ‘sixth mass extinction’, which, by definition, could eliminate more than three quarters of currently existing life forms in just a few centuries.61 In other words, it could threaten the practical possibility of the survival of earthly life. Mass extinction is not simply extinction (or death) writ large: **it is a qualitatively different phenomena that demands its own ethical categories.** It cannot be grasped by aggregating species extinctions, let alone the deaths of individual organisms. Not only does it erase diverse, irreplaceable life forms, their **unique histories** and **open-ended possibilities**, but it **threatens the ontological conditions of Earthly life**.

IR is one of few disciplines that is explicitly devoted to the pursuit of survival, yet it has almost nothing to say in the face of a possible mass extinction event.62 It utterly lacks the conceptual and ethical frameworks necessary to foster diverse, meaningful responses to this phenomenon. As mentioned above, Cold-War era concepts such as ‘nuclear winter’ and ‘omnicide’ gesture towards harms massive in their scale and moral horror. However, they are asymptotic: they imagine nightmares of a severely denuded planet, yet they do not contemplate the **comprehensive negation** that a mass extinction event entails. In contemporary IR discourses, where it appears at all, extinction is treated as a problem of scientific management and biopolitical control aimed at securing existing human lifestyles.63 Once again, this approach fails to recognise the reality of extinction, which is a **matter of being and nonbeing**, not one of life and death processes.

Confronting the enormity of a possible mass extinction event requires a total overhaul of human perceptions of what is at stake in the disruption of the conditions of Earthly life. The question of what is ‘lost’ in extinction has, since the inception of the concept of ‘conservation’, been addressed in terms of financial cost and economic liabilities.64 Beyond reducing life to forms to capital, currencies and financial instruments, the dominant neoliberal political economy of conservation imposes a homogenising, Western secular worldview on a planetary phenomenon. Yet the **enormity, complexity, and scale** of mass extinction is so huge that humans need to **draw on every possible resource in order to find ways of responding**. This means that they need to mobilise multiple worldviews and lifeways – including those emerging from indigenous and marginalised cosmologies. Above all, it is crucial and urgent to realise that extinction is a **matter of global ethics**. It is not simply an issue of management or security, or even of particular visions of the good life. Instead, it is about staking a claim as to the goodness of life itself. If it does not fit within the existing parameters of global ethics, then it is these boundaries that need to change.

9. An Earth-worldly politics. Humans are worldly – that is, we are fundamentally worldforming and embedded in multiple worlds that traverse the Earth. However, the Earth is not ‘our’ world, as the grand theories of IR, and some accounts of the Anthropocene have it – an object and possession to be appropriated, circumnavigated, instrumentalised and englobed.65 Rather, it is a complex of worlds that we share, co-constitute, create, destroy and inhabit with countless other life forms and beings.

The formation of the Anthropocene reflects a particular type of worlding, one in which the Earth is treated as raw material for the creation of a world tailored to human needs. Heidegger famously framed ‘earth’ and ‘world’ as two countervailing, conflicting forces that constrain and shape one another. We contend that existing political, economic and social conditions have pushed human worlding so far to one extreme that it has become almost entirely detached from the conditions of the Earth. Planet Politics calls, instead, for a mode of worlding that is responsive to, and grounded in, the Earth. One of these ways of being Earth-worldly is to embrace the condition of being entangled. We can interpret this term in the way that Heidegger66 did, as the condition of being mired in everyday human concerns, worries, and anxiety, to prolong existence. But, in contrast, we can and should reframe it as authors like Karen Barad67 and Donna Haraway68 have done. To them and many others, ‘entanglement’ is a radical, indeed fundamental condition of being-with, or, as Jean-Luc Nancy puts it, ‘being singular plural’.69 This means that no being is truly autonomous or separate, whether at the scale of international politics or of quantum physics. World itself is singular plural: what humans tend to refer to as ‘the’ world is actually a multiplicity of worlds at various scales that intersect, overlap, conflict, emerge as they surge across the Earth. World emerges from the poetics of existence, the collision of energy and matter, the tumult of agencies, the fusion and diffusion of bonds.

Worlds erupt from, and consist in, the intersection of **diverse forms of being** – material and intangible, organic and inorganic, ‘living’ and ‘nonliving’. Because of the tumultuousness of the Earth with which they are entangled, ‘**worlds’ are not static, rigid or permanent. They are permeable and fluid**. They can be **created**, **modified** – and, of course, destroyed. Concepts of violence, harm and (in)security that focus only on humans ignore at their peril the destruction and severance of worlds,70 **which undermines the conditions of plurality that enables life on Earth to thrive.**

## Method

#### The 1AC isn’t reformism – it doesn’t conflate change with progress or validate legal institutions – it’s a tactical intervention that reduces violence while exposing the contradictions within law.

**Spade 13** Dean Spade, associate professor of law @ Seattle University, “Intersectional Resistance and Law Reform” *Signs* Vol. 38, No. 4, Summer 2013

What intersectional politics demands¶ **Social movements using critical intersectional tools are making demands that are often difficult for legal scholars to comprehend because of the ways that they** **throw US law** and the nation-state form **into crisis**. **Because they recognize** the fact **that legal equality** **contains and neutralizes resistance and perpetuates intersectional violence and because they identify purportedly neutral administrative systems as key vectors of that violence,** critical scholars and activists are making demands that include ending immigration enforcement and abolishing policing and prisons. These demands suggest that the technologies of gendered racialization that form the nation cannot be reformed into fair and neutral systems. These systems are technologies of racialized-gendered population control that cannot operate otherwise—they are built to extinguish perceived threats and drains in order to protect and enhance the livelihood of the national population. **These kinds of demands and the analysis they represent produce a different relation to law reform strategies than the national narrative about law reform** suggests, **and** different than what is often assumed by legal scholars interested in the field of “**equality** law.” Because **legal equality “victories” are being exposed as primarily symbolic declarations** that stabilize the status quo of **violence**, declarations from courts or legislatures become undesirable goals. **Instead, law reform, in this view, might be used as a tactic of transformation focused on interventions that materially reduce violence or maldistribution without inadvertently expanding harmful systems in the name of reform**. **One recent example is the campaign against gang injunctions in Oakland**, California. A broad coalition—comprising organizations focused on police violence, economic justice, imprisonment, youth development, immigration, gentrification, and violence against queer and trans people—**succeeded** in recent years in bringing significant attention to the efforts of John Russo, Oakland’s city attorney, to introduce gang injunctions (Critical Resistance 2011). The organizations in this coalition are prioritizing anticriminalization work that might usually be cast as irrelevant or marginal to organizations focused on the single axis of women’s or LGBT equality. The campaign has a law reform target in that it seeks to prevent the enactment of certain law enforcement mechanisms that are harmful to vulnerable communities. However, it is not a legal-equality campaign. Rather than aiming to change a law or policy that explicitly excludes a category of people, it aims to expose the fact that a facially neutral policy is administered in a racially targeted manner (Davis 2011; Stop the Injunctions 2011).¶ **Furthermore, the coalition frames its campaign within a larger set of demands not limited to what can be won within the current structure of American law but focused on population-level conditions of maldistribution.** **The demands** of the coalition **include stopping all gang injunctions and police violence; putting resources toward reentry support and services for people returning from prison, including fully funded and immediate access to identity documents, housing, job training, drug and alcohol treatment, and education; banning employers from asking about prior convictions on job applications; ending curfews for people on parole and probation; repealing California’s three-strikes law; reallocating funds from prison construction to education; ending all collaborations between Oakland’s government and** Immigration and Customs Enforcement (**ICE**); **providing affordable and low-income housing**; making Oakland’s Planning Commission accountable regarding environmental impacts of development; ending gentrification; and increasing the accountability of Oakland’s city government while augmenting decision-making power for Oakland residents (Stop the Injunctions 2011). These demands evince an analysis of conditions facing vulnerable communities in Oakland (and beyond) that cannot be resolved solely through legal reform since they include the significant harm inflicted when administrative bodies like ICE and the Planning Commission implement violent programs under the guise of neutral rationales. These demands also demonstrate an intersectional analysis of harm and refuse logics of deservingness that have pushed many social movements to distance themselves from criminalized populations. Instead, people caught up in criminal and immigration systems are portrayed as those in need of resources and support, and the national fervor for law and order that has gripped the country for decades, emptying public coffers and expanding imprisonment, is criticized.¶ **Another example of intersectional activism utilizing law reform without falling into the traps of legal equality is activism against the immigration enforcement program Secure Communities. Secure Communities is a federal program in which participating jurisdictions submit the fingerprints of arrestees to federal databases for an immigration check**. As of October 2010, 686 jurisdictions in thirty-three states were participating.12 **Diverse coalitions of activists and organizations around the U**nited **S**tates **launched organizing campaigns to push their jurisdictions to refuse to participate**. Organizations focused on domestic violence, trans and queer issues, racial and economic justice, and police accountability, along with many others, have joined this effort and committed resources to stopping the devolution of criminal and immigration enforcement. **Their advocacy has rejected deservingness narratives that push the conversation toward reform for “good, noncriminal” immigrants**. **These advocates have won significant victories, convincing** certain **jurisdictions to refuse to participate and increasing understanding of the intersecting violences of criminal punishment and immigration enforcement**.13 This work also avoids the danger of expanding and legitimizing harmful systems that other legal reform work can present. It is focused on reducing, dismantling, and preventing the expansion of harmful systems.14¶ I offer these examples not because they are perfect—certainly a significant range of tactics and strategies are part of each of these campaigns, and, with detailed analysis, we might find instances of co-optation, deservingness divides, and other dangers of legal reform work occurring even as some are avoided and rejected. However, these examples are indicative of resistance to limitations of legal equality or rights strategies. These demands exceed what the law recognizes as viable claims. These campaigns suggest that those who argue that a politics based on intersectional analysis is too broad, idealistic, complex, or impossible—or that it eliminates effective immediate avenues for resistance—are mistaken. Critical political engagements are resisting the pitfalls of rights discourse and seeking to build broad-based resistance formations made up of constituencies that come from a variety of vulnerable subpopulations but find common cause in concerns about criminalization, immigration, poverty, colonialism, militarism, and other urgent conditions. **Their targets are administrative systems and law enforcement mechanisms that are nodes of distribution for racialized-gendered harm and violence, and their tactics seek material change in the lives of vulnerable populations rather than recognition and formal inclusion.** Their organizing methods mobilize directly affected communities and value horizontal structures, leadership development, mutual aid, democratic participation, and community solutions rather than top-down, elite-imposed approaches to political transformation. These analytical and practical methods owe a great deal to women-of-color feminist formations that have innovated and continue to lead inquiry and experimentation into transformative social justice theory and practice.15