The Urban Agriculture Incentive Zones Act (AB551): Implementation and Perceptions in Northern California

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ABSTRACT

Urban farmers and farms face many challenges and barriers. The Urban Agriculture Incentive Zones Act (AB551) seeks to mitigate these by facilitating land access for urban agriculture operations. The law, which may be adopted by counties and municipalities that choose to do so, aims to promote the development of sustainable urban farms for the public interest, and put vacant lots into fruitful production through a five-year minimum contract period between landowners and farmers. I document where the law has been adopted and implemented, and interview stakeholders in Northern California to understand their perceptions of the law, and how it may be improved. My findings suggest means of creating more sustainable and beneficial policy alternatives.

KEYWORDS

urban farms, food justice, land access, urban agriculture policy, food policy

INTRODUCTION

Urban agriculture can increase access to healthy and nutritious food available for urban consumers, and address injustices associated with the conventional agro-food system. With funding cuts to nutrition assistance programs and the lack of grocery stores in some neighborhoods, urban agriculture can foster the creation of social capital, provide jobs, improve mental and physical health, and provide environmental benefits to communities such as, developing ecological and visually appealing natural scenery by maintaining a community's green space (Fernandez et al. 2012). The food justice movement arose in tandem with the environmental justice movement, which aims to achieve equal access to healthy and nutritious foods across racial and class lines (Fairfax et al. 2012). Low-income people of color tend to suffer disproportionately with environmental burdens such as food insecurity and food injustices (Morello-Frosch et al. 2011). Thus, urban farming initiatives have emerged as potential means of accessing food. Food insecurity and environmental justice issues pose a problem in communities that need to be addressed through policies by reducing barriers to access.

There are many barriers that urban farmers face, but one of the largest barriers is obtaining usable land. Overcoming barriers to usable land brings forward other farming issues such as, the costs of maintaining urban farms and lack of infrastructure for farming. In many California cities, high land prices make it difficult for farmers to obtain access to land for farming (Lovell 2010). Land in urban areas, especially in northern California tend to be of high value, however, urban soils come with contamination concerns. Currently, urban agriculture is not integrated into regional and urban planning despite its many benefits because land use planners are not involved with these activities and overlook food system issues (Lovell 2010). Additionally, community and urban gardens are not necessarily valued at the same level as other green open spaces, further excluding gardens from the city planning process and are not necessarily protected in zoning regulations in the cities, making it more difficult to increase urban agriculture. There tends to be a lot of uncertainty regarding usable land availability and land tenure, making it challenging for accessing and securing opportunities and proper infrastructure to have urban agriculture. The land that could be used for urban agriculture is also at competition with other land uses such as, sports parks and fields, or building development that benefits the greater public more than urban agriculture (Lovell 2010).

Policies like California's Urban Agriculture Incentive Zones Act (AB551) can spur the creation of urban farms. Passed in January 2014, AB551 is a state law that authorizes municipalities with populations of 250,000 or more that choose to adopt the policy to make land for urban farming available at reduced costs through tax incentives for qualifying private landowners (Ly 2013). Landowners who participate in this program have their land assessed by the county tax assessors at a lower agricultural land property tax rate, instead of the commercial or residential rate (AB551 2013). AB551 incentivizes owners of blighted properties, and unimproved or vacant lots, to transform their land into green space and potentially allow for the cultivation of a local food source for their neighborhoods, to revitalize the economic and social health of communities (AB551 2013). Urban agriculture include crops, animals, flowers, and seeds that can be sold locally or elsewhere. With incentives for both landowners and urban farmers, AB551 seeks to reduce urban farming barriers and promote the transformation of unused lands into green spaces. But we do not know how effective AB551 is, given the recent nature of this policy, there has been little to no research done on the perceptions of AB551 with key stakeholders such as, urban farm advocates, academics, and urban farmers. And the first step in determining the effectiveness of AB551 is identifying patterns of adoption and implementation in northern California.

In this study, I observed AB551's implementation in northern California by looking at stakeholder perceptions in locations that have adopted the policy include San Francisco City and County, Santa Clara County, and Sacramento City. My main research concern takes at why AB551 has been adopted in some areas and not others in northern California because the policy incentivizes the development of urban farms by maintaining green space. I do this by researching which cities and/or counties implemented AB551 and how those locations accomplished that. Then, I analyzed patterns of adoption in northern California by exploring the cities'/county's pathways, barriers, and limitations. Using data collected from semi-structured interviews with key stakeholders, I observed pathways and barriers through stakeholder perceptions and what can be improved to help increase overall access to urban agriculture and usage of the tax incentive. Given the recent nature of this policy, there has been little to no research done on the perceptions of AB551's effectiveness with key stakeholders such as, urban farm advocates, academics, and urban farmers.

AB 551 and urban agriculture laws in California

Urban agriculture zoning laws in California date back to 1863 in San Francisco, where there were efforts to protect public health by separating slaughterhouses from the public. Under these laws, public health and planning officials had authority to place restrictions on private rights in the interest of general communal benefits and the common good. The concern for public health through regulating noxious releases by industry, sanitation, and air quality gave the local government power and set a precedent to regulate land use, empowering the government to address other public health issues, including food access (Feldstein 2007). From statehood in 1848 to the beginning of World War II, California built its economy through its natural resources and developed a chemically intensive industrial agricultural system that is essential to California's economy and that alternative food initiatives seek to address (Allen et al. 2003).

Assembly Bill 551, the Urban Agriculture Incentive Zones Act of 2014 (AB551 2013) aims to promote the development of sustainable urban farms for the public interest and put vacant lots into fruitful production. The bill is based on the Williamson Act, also known as the California Land Conservation Act of 1965, which gives owners of open-space land and farmland property tax relief in exchange for not developing or converting the land for ten years (CA Dept. of Conservation 2015). AB551 was initiated by California Assemblyman Phil Ting of San Francisco, a former San Francisco County Tax Assessor, who wanted to promote urban agriculture because urban farming can help build community, reduce crime and promote local food (Chamberlain 2013). AB551 authorizes cities and counties with a population of at least 250,000 people within boundaries of an urbanized area to qualify for adoption of the policy. A city or county area that has individual properties designated as urban agriculture preserves by the city or county for farming purposes also meets AB551's provisions. Specified agricultural use includes, but not are not limited to the cultivation of soil, production, cultivating, growing, and harvesting of any agricultural products (AB551 2013). A landowner can enter into a contract of at least five years with a city and/or county to use vacant, unimproved, or otherwise blighted lands for small-scale urban agriculture (AB551 2013). In order for a city or county to take advantage of AB551, a county needs to adopt it first, and then the cities within the county that meet the minimum qualifications can decide whether or not they want to implement the policy on a city level.

Cities that want to adopt the policy first complete a feasibility assessment that include potential benefits and financial implications of establishing urban agriculture incentive zones. Many cities find that there will not be a significant effect on property tax revenues, but landowners will save immensely on tax, reducing the amount of taxes that goes towards the city and school districts. Reducing the incoming tax flow to the city and school districts is not necessarily a good thing since funds will be diverted (Amoroso and Montojo 2014).

To find out how effective AB551 is, it is essential to know where the policy has been implemented. Because AB551 is a relatively new policy, the only known locations that adopted the policy are San Francisco County and city, Sacramento City, and Santa Clara County. Additionally, there are other cities and counties in California that are exploring the financial incentives AB551 offers. The San Francisco Board of Supervisors adopted AB551 on July 29, 2014 (Zigas 2014). Santa Clara County passed a resolution of approval authorizing cities to implement AB 551 in June 2015 and created the first urban agriculture incentive zone for unincorporated areas of the county in September 2015. The City of San Jose held hearings in October 2015, and is examining the topic. Sacramento passed an ordinance in August of 2015, and the County of Sacramento is exploring the idea. (Ruddock et al. 2015).

METHODS

For this study on examining the effectiveness of AB551, I first did online research to find out which cities and/or counties have already adopted the policy and where some places were considering adoption. I then did interviews with involved stakeholders and analyzed their responses by categorizing it into barriers, stakeholder perceptions, and incentives.

Study system

I examined implementation of AB551 in San Francisco County and City, Sacramento County and City, Santa Clara County, and select cities like San Jose (Figure 1, Table 1, Table 2).

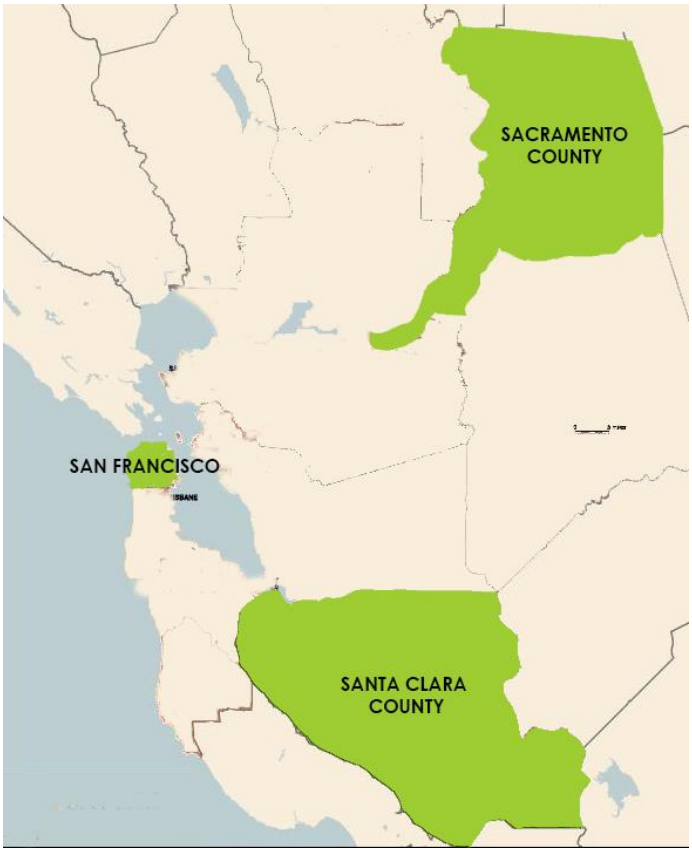

Figure 1. Northern California Study Areas. The areas in green are the counties that are in Table 1 and also places that have adopted AB551.

Table 1. Study Site 2014 Census Data. Source: Zillow.com home values for average real estate.
* Includes persons reporting only one race.
** Hispanics may be of any race, so also are included in applicable race categories.

County	San Francisco	Sacramento	Santa Clara
Population	852,469	1,482,026	1,894,605
Average Real Estate Cost (median home price)	$1,130,400	$295,500	$956,100
Density (Persons per square mile, 2010 census)	17,179.1	1,470.8	1,381.0
*White	53.8%	64.6%	56.4%
Black or African American alone	5.8%	10.9%	2.9%
American Indian and Alaska Native	0.8%	1.5%	1.3%
Asian	34.9%	15.8%	34.9%
Native Hawaiian and Other Pacific Island	0.5%	1.2%	0.5%
Two or More Races	4.2%	6.0%	4.0%
**Hispanic or Latino(b)	15.3%	22.5%	26.6%
White alone, not Hispanic or Latino	41.2%	46.6%	33.3%

Data collection and analysis

I conducted semi-structured interviews with urban agriculture advocates, urban farmers, and other stakeholders regarding AB551, in order to evaluate the effectiveness of the law in reducing barriers to urban agriculture. I ask stakeholders' about AB551's features such as, what they view as policy weaknesses, their role with the policy, and how the policy can improve. I analyzed the effectiveness of AB551 in reducing barriers to urban agriculture to understand the general perceptions of the policy by urban farm advocates, urban farmers, and other stakeholders by categorizing data into policy barriers, perceptions, and incentives and grouping similar interview responses. Analyzing these data allows for better insight into why this policy is not being adopted by many counties and cities.

RESULTS

Interviews with urban agriculture stakeholders regarding AB551 revealed the challenges and current state of the policy (Table 2, Table 3). Interview responses also gave insight into the barriers, perceptions, and incentives to urban agriculture offered by AB551.

Through the interviews with stakeholders, I categorized barriers to urban agriculture from what was disliked about AB551. Unless AB551 is renewed, the policy is limited to five years because it sunsets on January 1, 2019. An interview response indicated that AB551 requirements are flexible to interpretation by the city and county governments. Interview responses also indicated a lot of bureaucratic steps such as tax assessments and paperwork. Additionally, cities lose revenues when tax incentives increase to get more parties interested. A common barrier mentioned by the interview responses were the high land prices in northern California and land owners have a desire to build more profitable projects instead of developing farmland. In addition, some barriers to adopting AB551 itself, is the need for political support and creation of policies to make it possible to take advantage of the incentives.

Some common responses that stakeholders shared in the interviews were observed regarding AB551. Respondents shared that the policy is flexible to interpretation on the city and county level. AB551 is currently focused on vacant lots for urban farm ventures. Most of the

respondents also said AB551 is needed to maintain greenspace and carve out public space more permanently given the short duration of AB551. In addition, stakeholders said it is necessary to have political support to pass the policy on a county and/or city level.

Interview responses also indicated AB551's incentives. Some of these incentives include maintaining greenspace in urban areas that enable community members to connect access to healthy food. Another incentive that urban agriculture stakeholders shared was the minimum five year term for contracted parties who take advantage of AB551 that also provides a tax incentive for landowners.

Table 2. Interview Responses

Barriers	Stakeholder perceptions	Incentives
▪ Local governments implement own requirements due to policy flexibility ▪ Paperwork associated with taxes ▪ Cities lose revenues when tax incentive increases ▪ Land values are high in northern California ▪ Desire to build housing over developing farmland ▪ Different jurisdictions have their own requirements ▪ Policy limited to five years unless renewed	▪ Requires tax assessor and other supporters to pass the policy ▪ The law has flexible gray areas that cities are open to interpret for their own, specificity could be more beneficial for all. ▪ Currently focused on vacant lots for urban farms ▪ Need to carve out more public space permanently	▪ Cities adopt it in order to maintain greenspace ▪ Vacant lots are made productive and fruitful ▪ Great way to activate urban land that are generally sites for illegal dumping ▪ Connecting with healthy food access ▪ Creates a minimum five year term ▪ Tax incentive for landowners

Table 3. List of adopting jurisdictions

Adopted Jurisdictions	Considering Adoption
▪ San Francisco City and County ▪ Santa Clara County ▪ City of Sacramento	▪ City of San Jose ▪ County of Sacramento ▪ City of Berkeley ▪ Alameda County ▪ City of Los Angeles ▪ Los Angeles County

DISCUSSION

Given the insights on barriers, perceptions, and incentives provided by urban agriculture stakeholders regarding AB551 detailed above, the policy is not that operational and has its shortcomings. AB551 is a promising urban agriculture policy in California because it seeks to address the issue of access to land. AB551 has enormous potential since it was passed at the state level through urban agriculture advocates and community groups seeking to address barriers to urban agriculture. However, because AB551 is an optional statewide policy, it is not that effective because qualifying urban regions throughout California are situated in different contexts and variable in their agricultural needs. AB551 has a lot of incentives to offer, but can only be acquired when barriers to AB551 such as access to land are overcome. In addition to land access, AB551 must gain local political support on the level it gets adopted and face urban challenges where landowners would rather develop their land with more profitable ventures than with urban agriculture activities. With AB551's shortcomings, the policy can be improved by following other successful urban areas in their urban agriculture promotion.

Where is AB551 implemented?

Counties and cities that adopt AB551 do so because politicians side with urban agriculture, making politics an essential consideration during the implementation process of AB551. AB551 is an optional policy; counties and cities that choose to opt into the policy are generally invested in the idea of urban agriculture. It would not have made sense to make UAIZ a mandatory statewide policy, since there is usually a lack of city planning regarding urban agriculture (Cohen et al. 2014). Places that have already implemented AB 551 throughout the San Francisco Bay Area are San Francisco City and County, Santa Clara County, and the City of Sacramento (Ruddock et al. 2015). San Francisco City and County were the first adopting jurisdictions because AB551 was created by Assembly-member Phil Ting of San Francisco. Ting wanted to encourage small farms on vacant and blighted inner-city lands by creating a tax incentive for property owners to urban farming ventures and provide the community with locally grown and fresh food (Ting 2013). San Francisco's intention was to have fruitful production of the land that created healthier and sustainable food while deterring graffiti, trash, and crime that often is associated with blighted

areas. In addition to San Francisco implementing AB551, Santa Clara County followed suit because San Francisco set the precedent to reducing blight and expanding economic opportunity and finds urban agriculture a promising weapon in the fight against obesity and diabetes (Santa Clara County 2015). Santa Clara County acknowledged how agriculture is being depleted and developed and it is essential to maintain that land, rather than having landowners wait on the housing market to recover and develop the land, but also acknowledges that creating greenspace in the inner city will increase the value of the neighborhood it is in (Santa Clara County 2015).

Adoption processes

The differences in AB551 implementation reflect the operation of power in differential capacity in governmental structures. The levels of government, such as being a city government, or a county government reflect differences in implementing AB551. This is because the different levels of government have different goals in mind for urban agriculture in their respective jurisdictions. Each government also has their own share of resources that they must account for. Thus, statewide enforcement of AB551 was not feasible because it inconveniences smaller municipalities or those with less resources. Mandating AB551 statewide would require an unwanted commitment of resources to implement and enforce the policy. For example, cities or counties would need to complete feasibility analyses, develop teams to create an application for the tax incentives, create an administrative team to deal with the paperwork, and create an enforcement team (Amoroso and Montojo 2014). Additionally, some municipalities may need to address their agricultural uses laws and zoning ordinances to allow AB551's incentives to be obtained. Once a city or county overcome the barriers to adoption, then, AB551 would get passed. Therefore, it is essential that the county or city tax assessor support urban agriculture and the policy. In addition to the tax assessors, it is also critical that there is political support from the county and/or city politicians and community members. It is a very political process to overcome barriers to passing AB551 on either the county or city level, or both.

Stakeholder perceptions

Stakeholders can often have firsthand experiences with the policy process and can share insights into why a policy may or may not be effective. Urban agriculture advocates identified barriers they encountered in promoting the policy on the statewide level. For instance, in the City of Sacramento, the process began when urban agriculture advocates deliberatively considered how the city could take advantage of vacant lots, but first had to put through policies at the city level that helped support the passage of AB551. In Sacramento, the Sacramento Urban Agriculture Coalition was a group involved in passing AB551, but in order to do so, they needed to pass policies that set up the policy arena for passing AB551. The City of Sacramento had to amend the zoning code to determine what kind of buildings were able to participate and classify the food products that would qualify as urban agriculture products under the law (Read 2015). Before, Sacramento did not have any policies that made actions of urban agriculture legal in the zones proposed by the Urban Agriculture Incentive Zones Act. In order to make sure AB551 could be accessed and work for the people who wanted to take advantage of the Urban Agriculture Incentive Zones, policies needed to be passed that legalized urban agriculture operations, it would not make any sense to adopt AB551 if people could never use it because of additional policy barriers that could be addressed. Sacramento City needed to lay the groundwork in order to pass the urban agriculture ordinances, and then be able to pass AB551 to be used.

The state level policy for AB 551 allows for a lot of interpretation and flexibility on the ends of the city and counties to create more restrictions for urban agriculture, which in turns creates more barriers for urban farmers, rather than mitigating the barriers urban farmers face. The ways in which the policy has been adopted in different cities and counties varies. For example, the City of Sacramento requires an installation of a water meter hook up that which can cost more than $3,000, which can be a significant barrier to entry for urban farmers (Read 2015). The water meter installation are a costly need for land that does not have existing water meters. This creates even more barriers to urban agriculture, contrary to the intentions of AB551 seeking to address land access issues. It is first necessary to address what is lacking in farm infrastructure in order to take advantage of AB551's incentives. However, farmers are already struggling to find usable and accessible lands. In addition to farmer struggles, cities requiring infrastructure that may be lacking

can come with unplanned costs, creating more barriers that may discourage urban agriculture, rather than promoting it.

Differences of perceptions

Interestingly, the urban farmer that was interviewed found no issue with AB551 and its provisions, whereas the urban agriculture enthusiasts and academics found that AB551 had its shortcomings. These differences of perceptions could potentially be due to the regional variances and locations of stakeholders interviewed. In Sacramento, the urban farm advocate who works with AB551 also applied to for the incentives offered by the policy found that AB551 could be improved. Contrary to the San Jose farm, the Sacramento urban farm venture is much smaller than the San Jose urban farmer with a larger scale operation. The San Jose farmer did not think that AB551 had any issues at all. This is probably because San Jose has not passed the policy yet, but nothing can be confirmed.

Policy failure and possibilities for reform

One of the shortcomings of this policy are its minimum of five years contract time between landowner and urban farmer. Five years is not enough time for urban farmers to connect with the land and to develop the land. There may be a need to remediate the soil because vacant lots tend to be in urban areas where the soil was contaminated with toxins and is not immediately a healthy medium to grow food on. Soil remediation processes can take more than five years and by the end of the contracted time, the soil would be in better condition and thus, the urban farmer would have increased the land value, making it even more valuable for the land owner. In addition to having a contract, it requires two parties to be on the same terms and on the same page. Farmers need to be willing to pay the price that the landowners set in conjunction with the landowners willing to meet the needs of the farmer (Zigas 2016). Urban land tends to be more valuable and instead of taking part in tax incentives, landowners would generally want to develop their land for more profitable ventures (Bennaton 2016, Zasada 2011).

It is also interesting to consider the peri-urban areas and their market price for insight into improving policy in the urban areas. Peri-urban areas, alongside the urban areas must compete

with the land market for other uses besides agricultural use such as housing developments and face how land prices rose over-proportionally for attractive and available land with dwellings (Zasada 2011). Agriculture plays a critical role in managing the landscape and social, aesthetic and environmental functions through many ecosystem services such as, water infiltration, groundwater replenishment, and flood control (Zasada 2011). Urban agriculture through the maintenance of green space would provide visual amenities that are highly valued in a community, further increasing the value of the land. Additionally, organic farming is highly appreciated by urban residents because it is environmentally oriented and can also increase the costs of land (Zasada 2011). Not only do these agricultural areas provide visual amenities to a community, it also is essential for health and quality of life in urbanized areas; natural areas have more positive effects than an urbanized one (Zasada 2011).

In addition, brownfields, which tend to be "abandoned, idled, or under-utilised industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived contamination," (McCarthy 2002) face similar issues as urban area blighted lands. These brownfields have wide ranges of contamination, but the lands generally in urban areas are small commercial or even residential lots with suspected amounts of contamination. These redevelopment projects tend to be very expensive and costly and are focused in areas where higher-income residents are already economically viable without the aid of government cleanup (McCarthy 2002). These operations will increase the value of the land in the area, so focuses should be in the more non-economically viable sites in needy communities, but redeveloping these contaminated lands can give way to green spaces that provides recreational, cultural, and other community facilities (McCarthy 2002). The soil and land remediation necessary for the urban revitalization can have positive benefits and improve society and environmental goals, but must be done in a manner that does not exclude groups of people that perpetuate injustices.

Food production also plays a critical role to urban areas, as well as peri-urban areas. Consumers are moving towards a preference for regional food production, especially high quality and natural products like fruits, vegetables, or ornamental crops (Zasada 2011). An emphasis on short supply chains and direct interaction of actors is greatly appreciated in the urban setting and can be provided through urban agriculture. Growing concerns over climate change and environmental issues have increased society's interest in welcoming urban agriculture and to preserve biodiversity and ecosystem benefits associated with the maintenance of green space.

Creating these green spaces and agricultural areas attracts new and affluent neighbors who drive up housing development and land prices (Zasada 2011). These high land prices can be extended to most areas and also contribute to the difficulties in accessing land, especially in the San Francisco Bay Area.

Limitations of this study

Based on the differences in land values and land uses throughout California, the results of this study are applicable to some areas and not others within California. Differences of perceptions could be due to the differences in urban regions throughout California that generated different opinions about AB551. A general consensus is that urban land tends to face issues of development versus the maintenance of greenspace when it comes to promoting urban agriculture. Additionally, implementing AB551 requires the support of political entities and community members of places exploring policy adoption. The regional differences and access to natural resources also vary in northern and southern California and this study was limited to information in northern California, therefore, extending the results of this study to southern California and the rest of California may not be the same.

Future research considerations

It would be interesting to obtain the city or county's vacant lot data assessed for AB551 through GIS mapping software and overlaying those layers with Census data on demographics, income, and land values to observe trends in where AB551 is implemented or where interested parties may want to develop urban agriculture in these regions. The overlay could give beneficial information on how incorporating aspects of environmental and social justice in planning for greening spaces with disadvantaged communities or blighted lots that attract crime. It is essential to incorporate deeper social issues into the understanding of what may cause food insecurity and address it through policy and planning to promote urban agriculture and help communities connect with access to food and healthy, vibrant communities.

Broader implications

This study highlights the intricacies of politics and economic difficulties that urban agriculture faces, even when policies seek to address barriers to urban agriculture for its promotion. AB551 was not an effective policy due to its shortcomings, however, it does have potential its potentials. Few people are able take advantage of AB551 because other barriers still exist besides land access. AB551 is a land access policy, consequently, other barriers not related to land access were not accounted for after addressing access to land. This study highlights the ineffectiveness of AB551 due to its limitations, such as the high cost of land in tandem with landowners wanting to develop more profitable ventures with the policy almost halfway through its time duration, since it will sunset on January 1, 2019. AB551 is a hopeful policy for addressing the barriers to land access, and it may be more beneficial in southern California, or regions where land is cheaper. The urban areas in northern California have high real estate values associated with the tech and startup booms. These regional differences are essential to account for when considering differences in AB551 implementation.

A successful urban location for urban agriculture is the concrete jungle of New York City, an expensive urban setting with sky-rocketing land prices with many urban farms throughout its dense city. New York City was able to create a fruitful urban agriculture policy process because relationships with policy makers were crucial to hear out urban agriculture organizations for shaping policy decisions and development around urban agriculture. Planning and policy does not have to be limited to traditional spaces, but can occur among practitioners, supporters, academics, government officials, funders, and other individuals and organizations with a stake in the future of urban agriculture (Cohen and Reynolds 2014). These policy challenges can be overcome and will yield rewarding results, benefitting all involved parties. In order to push urban agriculture as a means to advance environmental and social justice, it is essential to acknowledge that the barriers to urban agriculture are not only limited to land access, but also the willingness of people and stakeholders to collaborate with and make fruitful urban agriculture operations that will benefit surrounding communities.

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