# Local Versus Global: Examining the Role of Nonprofits in Forest Conservation and Conflicts between Local and International Organizations

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## Introduction

Amazonian deforestation has been a major issue over the past century. From a growing population, to an expanding agriculture industry, there are a variety of factors that drive deforestation. While awareness of deforestation and its consequences has been increasing, the Amazon has, historically, been viewed as a barrier to economic growth, and its destruction has been supported by governments. In just the past 30 years, 17 percent of the Amazon has been converted from forest to other land uses and each year areas of forest equivalent to the size of New Jersey are deforested (Azevedo-Ramos, 2007).

The ramifications of deforestation are significant as the Amazon Rainforest provides a number of environmental benefits and ecosystem services, and contains over 20 percent of the world's species. Deforestation threatens species diversity in the Amazon and poses a great threat to global climate change as deforestation hinders the forest's ability to sequester carbon dioxide and causes large amounts of carbon to be released into the atmosphere. In addition to these consequences, deforestation threatens the livelihoods of the communities that inhabit the forests as their resources are taken away and they are forced to give up their ways of life.

Deforestation in the Amazon has become a global issue and the consequences are felt on both the local and global level. These consequences, however, are different for each community. In their book *Forests and Livelihoods* Barraclough and Ghimire (1995) stress that there exists great variability in consequences across different social, economic, and geographic situations. While the complexities of these consequences and how they affect different individuals are beyond the scope of this thesis, it is important to note the differing consequences between the local and international communities. Barraclough and Ghimire as well as Eccleston (1996) discuss the consequences in both the local and international context.

In terms of local and regional consequences, these authors cite soil erosion and degradation, air pollution, and water pollution. The rural inhabitants are the ones most adversely affected because deforestation has harmful effects on the diet and health of the communities residing in and around the forests. Furthermore, loss of forest land and environmental degradation deplete the resources that communities depend on to survive. A decrease in the supply and quality of forest resources leads to an increase in costs of maintaining their lifestyles. Eccleston (1996) explains that as forest supplies become scarcer, both household income and productivity decreases. For example, men have to travel further to hunt or to obtain other employment. As this happens, the burden at the household is increased and productivity of subsistence farming decreases (119). The ways of life of these communities are greatly threatened by the environmental impacts of deforestation.

The international community also experiences the consequences of deforestation, but in a different manner. International consequences come in the form of decreased biodiversity and climate change as a result of a reduced capacity to sequester carbon from the atmosphere. Because of these consequences, the international community is working towards developing effective policies to reduce deforestation and climate change. However, many of the conservation solutions have been highly debated due to the potential adverse effects they would have on local communities.

The local communities rely on access to the forests to survive, while the international community derives their benefits solely from the fact that these forests exist and provide various environmental services. The externalities of deforestation for the international community are different than those of the local communities. This means that the optimal level of conservation

would be different for each group. These differing interests present a problem for determining whose needs should weigh more in establishing the socially optimal level of conservation.

Since deforestation has become a global problem, many environmental and conservation nonprofit organizations have been established to address this issue. These organizations take on a number of roles, including research, on the ground conservation efforts, advocacy, and education. This thesis, however, will focus on the expressive role of nonprofits in forest conservation, that is, their role in raising awareness, influencing public opinion, participating in debate, and advocating for environmental policies.

There also exist a wide range of organizations ranging from small grassroots organizations to large, international organizations, all with unique goals and strategies. Non-governmental organizations (NGO) are now even able to participate in climate change discussions in the United Nations. This is an indication of their growing importance as actors in environmental and climate change policy discussions. As conflicts arise over what types of solutions should be sought, even more organizations appear, representing myriad groups and opinions.

The current literature provides much evidence for the existence of conflicting interests in global environmental governance. Specifically, the literature discusses between the international community and the local communities in the regions where deforestation is occurring. Even though on the surface, it seems as if local and international NGOs share common ground in their desire for forest conservation, they experience conflicting objectives and beliefs as well. Given that conflicts exist, and on many different levels, this thesis investigates how these conflicting interests have affected the goals and strategies of international and local NGOs.

## The Role of Non-Profits in Environmental Issues

The role of civil society in global governance has expanded dramatically starting in the nineteen- nineties as a result of "numerous factors, from the development of information technology to the greater awareness of global interdependence to the spread of democracy" (Gemmil and Bamidele-Izu, 2002). Hawkins (1993) also notes that NGOs have begun to take a more active role in the development of environmental policies and have greatly influenced the process of policy making. As environmental problems become global, non-profits have sought to form international alliances to find solutions and include those groups of people that are not traditionally involved in the political process (Frumkin 2005). Not only have NGOs become more active in policy development, they have been successful in bringing environmental issues to the global agenda and creating greater awareness.

Frumkin and Gemmil and Bamidele-Izu highlight different roles that civil society and nongovernmental organizations (NGOs) assume in global environmental governance. These roles include identifying problems, building awareness, influencing public policy, organizing and encouraging public participation, representing marginalized groups, and establishing and strengthening networks between groups of people. Gemmil and Bamidele-Izu argue that the participation of NGOs will significantly strengthen the global environmental governance regime because of their "creativity, flexibility, entrepreneurial nature, and capacity for vision and long-term thinking" that distinguishes them from governments (13). The specific roles of NGOs and civil society in global governance, however, are still up for debate. The authors argue that more needs to be done to establish concrete roles and structures for civil society participation in international decision making processes. Nonetheless, there are many reasons to strengthen the role of NGOs and civil society in global environmental governance. These organizations are a

"driving force behind greater international cooperation" (2). In addition, Gemmil and Bamidele-Izu argue that NGOs play an important role in the implementation of environmental programs. They also act as "alternatives to weak or inadequate democratic institutions" (9). They represent groups that would otherwise go unrepresented in international policy discussions, opening up new and inclusive dialogues, and bringing innovative ideas to the discussion.

While non-profit organizations have taken on a key role in environmental issues and policy, there are still concerns about their roles and their effectiveness. In his discussion on the role of non-profits in the international community, Peter Frumkin questions whether the ideas and models developed by nonprofit organizations are the most effective. Since many of these ideas are influenced by the "fads and trends" that arise in nonprofit activity, it is uncertain that the organizations are working to achieve a socially optimum outcome. Frumkin directs concern to the fact that in many fields, the rapid development and replication of ideas can hinder communication between big international actors and small, grassroots organizations. He stresses the importance of the local organizations being able to share their knowledge and further argues that the individuality of the organizations must be protected (61). This is because there is concern about the ability of local organizations to "maintain their local identities" especially when they find themselves under pressure from funding sources that may influence their goals and mission (58-60). These concerns raised by Frumkin highlight the potential for conflicts to arise between different types of NGOs, specifically between local and international NGOs. They also highlight the ways in which both types of organizations may fail to effectively change environmental policy and find the socially optimal solution.

In their analysis of the consequences of deforestation for the local communities in the Amazon, Barraclough and Ghimire claim that local communities are a vital factor in the creation and implementation of solutions:

> Viable alternatives to the present non-sustainable uses of natural resources will have to come primarily from those social groups whose survival is most directly threatened. They are the only ones with sufficient self-interest and knowledge of local conditions to devise improved resource management systems. (63)

The authors stress the importance of NGOs and of governments understanding the management practices of the forest communities. Solution strategies must take into account the "dynamics of local people's livelihood systems" (107). Furthermore, Fearnside (2001) argues that local communities and organizations are the closest to the regions where conservation is a concern; they know the most about the issue of deforestation because they are the ones directly experiencing it (176). For these reasons, the authors stress the importance of collective organization among the local communities to defend their lands and livelihoods. While the outcomes of organization efforts are never clear, they argue that grassroots organization is the only way for communities to get their interests recognized. This motivates the question of whether or not international environmental NGOs are an efficient answer to solving deforestation.

## Globalizing Forests: Conflicts Between Organizations

The discussions about the role of nonprofit organizations in environmental policy making are important when considering the issue of representing local and indigenous people in forest areas. These communities greatly depend on the forests for their livelihood and are directly affected by forest conservation policies. According to the World Bank Group (2002)

> More than 1.6 billion people depend to varying degrees on forests for their livelihoods. About 60 million indigenous people are almost wholly dependent on forests. Some 350 million people who live in or adjacent to dense forests depend on them to a high degree for subsistence and income. In developing countries about 1.2 billion people rely on agroforestry farming systems that help to sustain agricultural productivity and generate income. (15)

Colchester et al. (2006) point out that while these data may not be completely accurate, the fact that little is known about who depends on the forests for their livelihoods means that the interests of these people may go ignored when it comes to designing and implementing forest management policies. Though the research focuses solely on law enforcement policies in the forest, it highlights the negative effects that forest management policies can have on indigenous and local communities. Some of these effects stem from policies that limit or prohibit access to the forests that are necessary for the livelihood of these people. Kaimowitz (2003) emphasizes that forestry and conservation laws disregard local communities and indigenous people. He argues that they "fail to recognize indigenous and nomadic peoples' rights over the territories they have historically occupied and [fail] to take into account their traditional farming, hunting, fishing, grazing, and gathering practices" (204). As a result, these types of laws restrict the ability of these communities to continue their traditional ways of life.

Since deforestation has become a global issue, many conflicts and problems have arisen as policy solutions are devised and discussed. Eccleston (1994) and Hawkins (1994) argue that as a result of this globalization, local communities are often ignored and excluded from the discussions. Furthermore, conflicts between northern and southern countries have caused problems in reaching agreements. Many environmental concerns, such as tropical deforestation, are directed at southern countries. While the Northern countries want to increase conservation, it is the Southern countries that are directly affected by the conservation and, consequently, bear a majority of the costs. Southern NGOs argue that this is a means for the northern countries to

avoid reducing their own carbon emissions. Southern organizations have also argued that proposed conservation solutions do not take into consideration the effects on local access rights to the forests.

Eccleston, Hawkins, and Barraclough and Ghimire all point out that while local rural communities are the ones most affected by deforestation, they are also seen as the cause of deforestation by the developed world. This further adds to the conflict between north and south. While many environmental NGOs are mainly concerned with conservation and climate change mitigation, local NGOs are concerned with protecting local property rights. This is especially the case now that the forest resources have become a global good and have been taken out of the control of the local communities. Eccleston further argues that a change must occur in the way global policies are being made in order to increase representation of local communities and other marginalized groups. Since the local communities struggle for representation, NGOs have been established in order to fulfill this need.

Now that environmental problems are being defined in a global context, Hawkins (1994) argues that solutions no longer take into account local perceptions and consequences. International "expert" bodies determine how resources should be allocated and as a result, international needs are becoming the priority. The consequences that solutions have on local communities are ignored, which raises concern about domestic equity issues. Both Hawkins and Eccleston point out that while climate change and deforestation might be an issue over which the different communities share common ground, the problems that both communities are addressing and the solutions they seek are not the same. This is where conflicts between international and local organizations originate.

Local NGOs based in the affected communities were originally established to provide "basic human services" and to protect the rights of those that they are representing. Hawkins argues that the growing emphasis on environmentalism provides a means through which these organizations can address the issues of rights and equity. She also notes that national and local level NGOs have begun to make themselves a part of the international decision-making process, but as they do so, future conflicts arise. Michael Chapin (2004) highlights these conflicts as he describes the actions of large international NGOs such as the World Wildlife Fund, The Nature Conservancy, and Conservation International. His research found that, in many cases, these NGOs ignored the indigenous communities in the areas of their work. Even after efforts of collaboration and signed agreements, the organizations did not include indigenous people in their conservation strategies. Though this is only one example, it demonstrates that the conflicts over solutions to deforestation arise between not only governments and different social groups, but among nonprofit organizations as well.

## Economic Model

### Model for Deforestation

The analysis in this thesis follows the von Thunen and Angelsen (2001, 2007, 2010) model. Their work is adapted to include nonprofit behavior in forest conservation. The von Thunen model, a theory of spatial economics, uses the concept of land rent to describe land use changes. Von Thunen defined land rent as "that portion of farm revenue that is left after deduction of the interest on the value of the buildings, timber, fences and all other valuable objects *separable from the land"* (18). In other words, it is the value of the land after all the

costs have been subtracted. Rent is different from the land's value, which includes all benefits of a parcel of land. Furthermore, different land uses, such as agriculture and standing forests, produce different rents. It is this idea that drives the model and determines how land will be used.

Rent is the land's profit and is summarized by Angelsen in the following equation:

$$r(d) = py - wl - qk - vd$$

Where $y$ is the output, $p$ is the output price, $l$ and $k$ are labor and capital inputs, $w$ and $q$ the respective prices of labor and capital, $d$ the distance from markets, and $v$ the transportation costs per distance unit. Von Thunen established that land rent is the revenue obtained from the total yield of a piece of land minus the costs of production (labor and capital) and costs of transportation.

For this analysis two types of land uses are considered: forest and agriculture. The rents from each of these uses can be defined by the above equation and are depicted in figures 1 and 2 where the vertical axis represents rent and the horizontal axis represents the amount of deforestation taking place. Agricultural rent is, therefore, the profits received from agricultural production minus the costs of production. In terms of this model, agricultural rent is a function of the distance from the market, which determines the total transportation costs ($vd$). As the distance from markets increases, transportation costs increase and rent decreases. This gives rise to the downward sloping rent curve. Any change in distance from the market will cause a movement along the rent curve.

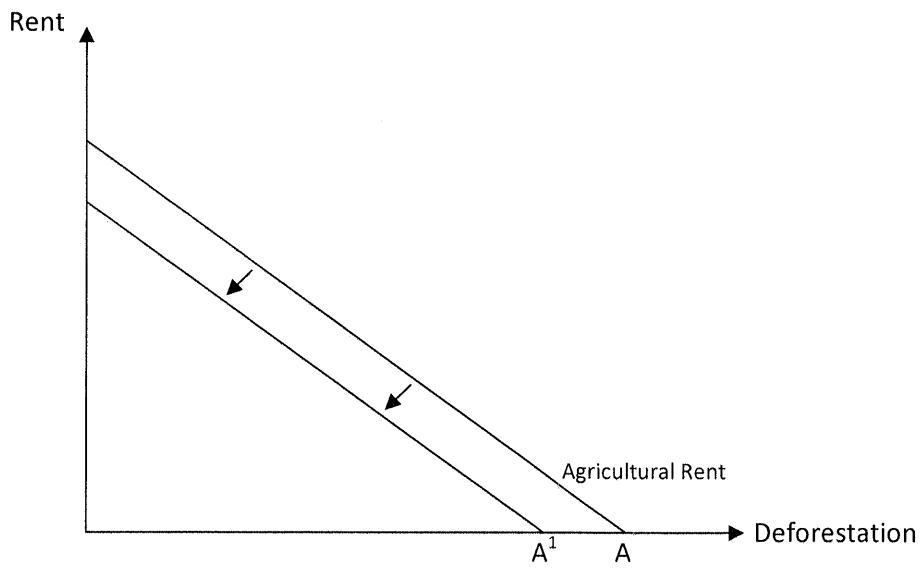


**Figure 1: Deforestation outcomes, with forest benefits equal to zero**

According to this model, temporarily ignoring any forest rent, a firm will convert forests to agriculture until the marginal benefits are zero, since the marginal cost – forest rent is temporarily being ignored. In terms of the above equation, the agricultural frontier will expand until $r(d)$ is zero. Using the above equation, and setting it equal to zero, the amount of forest converted to agriculture, point A in Figure 1, can be defined as follows:

$$d = \frac{py - wl - qk}{v}$$

This equation gives us the distance (d) from the market that land will be converted to agriculture. It is directly related to the amount of deforestation. As the distance from the market increases, so does deforestation (though the two values are not equal).

Forest use will then change according to changes in agricultural rent. Changes in factors such as costs of production ($w$ or $q$), crop prices ($p$), labor and capital inputs ($l$ and $k$) as a

result of technological change, and transportation costs ($v$) will change how much forest is converted to agriculture. These variables will cause the agricultural curve to shift up or down. For example, if wages increase, the agricultural rent decreases at all distances. The agricultural rent curve will shift down to the left and the amount of forest converted to agriculture will decrease to A′ in figure 1. If technology improves (reducing the amount of $l$ or $k$ or both), costs of production decrease, and the agricultural rent increases at all distances. This would lead to an outward shift in the curve, and an increased amount of forest converted to agriculture.

The above example is used to establish the concept of agricultural rent and its relationship with deforestation. It is not consistent with what actually happens because it ignores forest rents. Because standing forests provide market benefits, it is not expected that they will be converted entirely to agriculture. Forest rent comes from the profits (or, more generally, the benefits) received from the *standing* forests and their products. The activities creating these profits do not cause any deforestation. The forest rent curve, depicted in figure 2, is upward sloping because of the increasing prices of the forest products as more deforestation occurs and the products become scarcer. As the amount of forest decreases (moving right along the horizontal axis), the supply of forest output declines causing the value to increase.

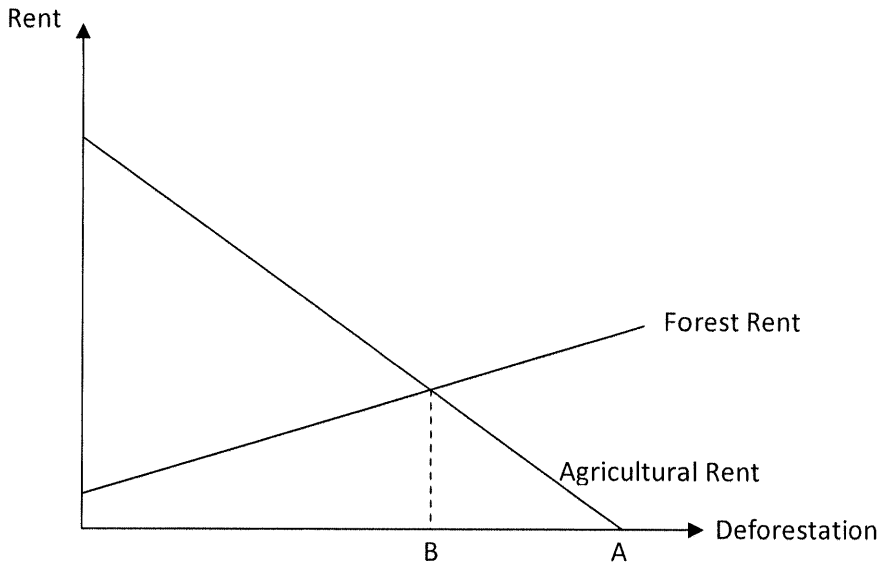


**Figure 2: Land conversion outcomes with forest rent included**

Since these private forest products have a market value, forests will be converted to the point where the additional rent provided by the last unit of forest is equal to the additional rent from the last unit of agricultural land. In other words, this is the point where the marginal costs of deforestation (forgone private forest rent) equal the marginal benefits (agricultural rent). For example, if all forest lands are standing, the value of the first unit of forest to an agricultural firm is much greater than the value of this last unit to a forest user. For this reason, the agricultural firm would outbid the forest user for the rights to the unit of land which would then be converted to agriculture. This would occur until the agricultural rent is equal to the forest rent (profits from *standing* forests) on the margin. It is depicted by point B in figure 2. Deforestation, therefore occurs when agricultural rents increase, or when forest rents decrease.

The private forest products however, do not capture the entire value of the standing forests. The fact that products from standing forest generate profits means that some amount of forests will remain standing, but this amount of standing forest will not be sufficient for the local or international communities. This is due to the public goods characteristic of forests. In addition

to the profits from forest products, both the international community and the local communities derive benefits from the forests. These benefits, since they are not traded on markets and do not generate revenue, are not valued in the market. Forests provide public goods and therefore, increase the social marginal costs of deforestation.

Local public goods provided by forests include such things as watershed protection and the preservation of other natural resources such as soil, fish, game, and plants. These are resources that local and indigenous communities use and rely on for their livelihoods. The costs of deforestation that these communities are faced with include such things as soil erosion, soil degradation, air and water pollution, damage to fish populations and depletion of other resources. The benefits that the forests provide, as well as the costs of losing the forests, are included in the value of the local public goods. Taking into account these local public benefits, the socially optimal amount of deforestation will occur at point C in figure 3.

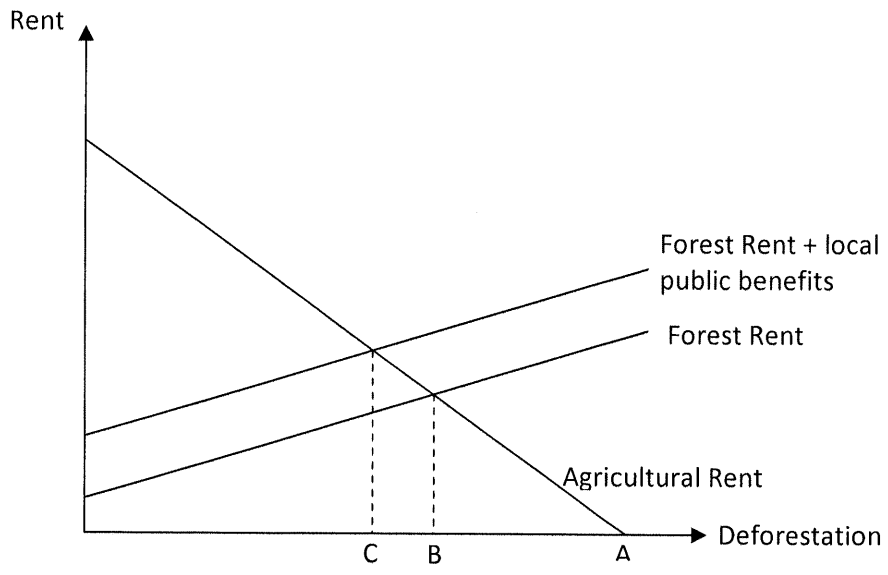


**Figure 3: Deforestation outcomes with local public benefits**

The last component of total forest benefits comes from the benefits that the global community receives from standing forests. These global public forest benefits include carbon sequestration, biological diversity, as well as the existence value of the forests (the benefits that people receive from just knowing that the forests exist). Adding global public benefits to the local and private forest valuation functions, moves the socially optimal level of deforestation to point D in figure 4. The forest rent curve that includes the local and global public benefits is depicted by the topmost curve in figure 4.

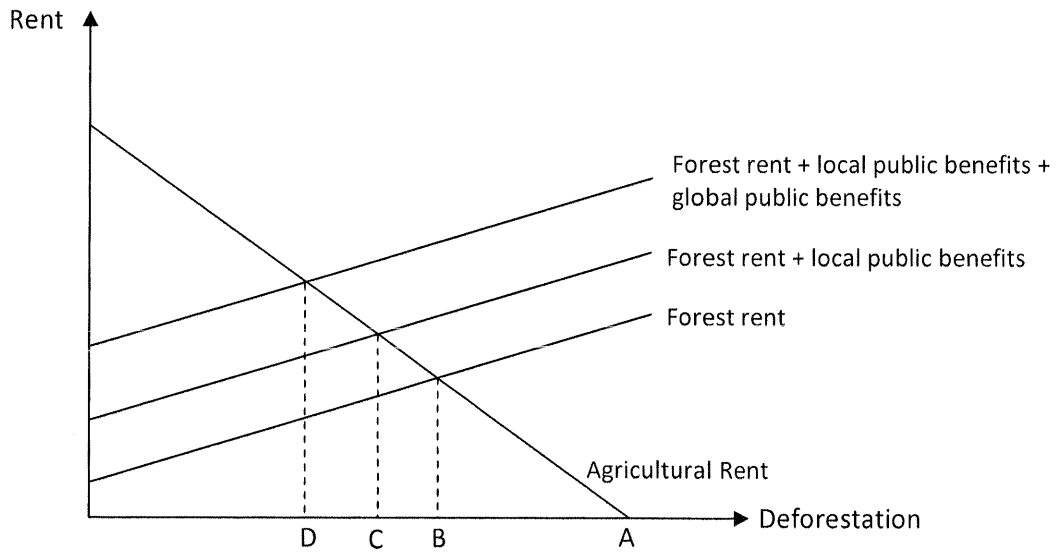


**Figure 3: Deforestation outcomes with local and global public benefits**

As stated above, deforestation will occur where private forest rent and agricultural rent are equal (point B) and land use will change as a result of changes in the forest and agricultural rent functions. If agricultural rents increase at all distances, the agricultural rent function shifts outwards, and more deforestation would occur. If the forest rent increases at all distances, the function shifts outward, and land would be converted back to forests. Given the presence of local and global social benefits from the forests, however, these outcomes are not optimal.

Historically, countries such as Brazil, have implemented policies aimed at growing and supporting the agricultural industry. Some studies have found these types of policies to be one of the biggest factors of the increase in Amazonian deforestation. Moran (1993) and Nepstad (2006) both conclude that policies such as infrastructure creation, colonization programs[1], and money incentives for large-scale ranching, led to increased deforestation. In terms of this model, these policies, which encouraged the growth of agricultural and pastoral production, increased agricultural rents by lowering production and transportation costs, or by increasing the price of agriculture products. This caused agricultural rents to rise (depicted by a rightward shift in the agricultural rent curve) and led to more land conversion from forests to agriculture.

**Nonprofit Action and Policy Outcomes**

In addition to policies that have led to increased deforestation, the public goods characteristic of forest benefits (both local and international) discussed above, lead to an inefficient amount of deforestation. Forests will be converted to agriculture past the optimal quantity. Given this inefficient outcome, nonprofit organizations can work to achieve the optimal level. They can either take on an instrumental role through directly providing forest conservation, or an expressive role by representing the public and working to change policies that affect forest conservation and land-use.

To analyze the expressive role of nonprofits in influencing public policies, a range of public policies providing different levels of forest conservation (ranging from 0 to 100 percent of forests being conserved) will be considered. Initially a country will set a policy, point P in figure 3, to promote a low level of conservation, such as policies that support the agricultural industries.

[1] Brazil's colonization programs, which started in the 1970s, are government subsidized resettlement programs to encourage people to move from densely populated areas to less populated regions (Peres and Schneider, 2012).


**Figure 5: Forest Conservation policies absent involvement from nonprofit organizations**

Both local and international nonprofit organizations, as representatives of the local and international communities, respectively, will work to shift policies in the direction of more forest conservation. The types of policies that nonprofits would lobby for might include ones that lower agricultural rent, policies aimed at conserving specific amounts of forest, or ones that give local communities the property rights to the forests in which case, the communities would decide themselves how much land to convert and to conserve. Regardless of the types of policies the nonprofits target, these organizations will work to represent the voices of their respective communities and increase public awareness of deforestation and its consequences. As the needs of the communities are more fully represented, the distribution of people who want more forest conservation increases, and policy makers would choose a new policy option.

The desired conservation outcome, however, will differ for each type of nonprofit organization (local or international) as shown by the different optimal amounts of conservation in the land-use model. These differing goals will influence the types of policies for which a nonprofit organization will advocate.

The local nonprofit will continue to work towards influencing policies until the amount of deforestation reaches point C in figure 3, where the benefits that local communities receive from the forest will be equal to the costs of deforestation for the agricultural firm. The advocacy work of the local nonprofit will cause a shift in the policy preferences distribution function and lead to the implementation of a policy that achieves the local optimal level of forest conservation. This policy is represented as $P^1$ in figure 6.

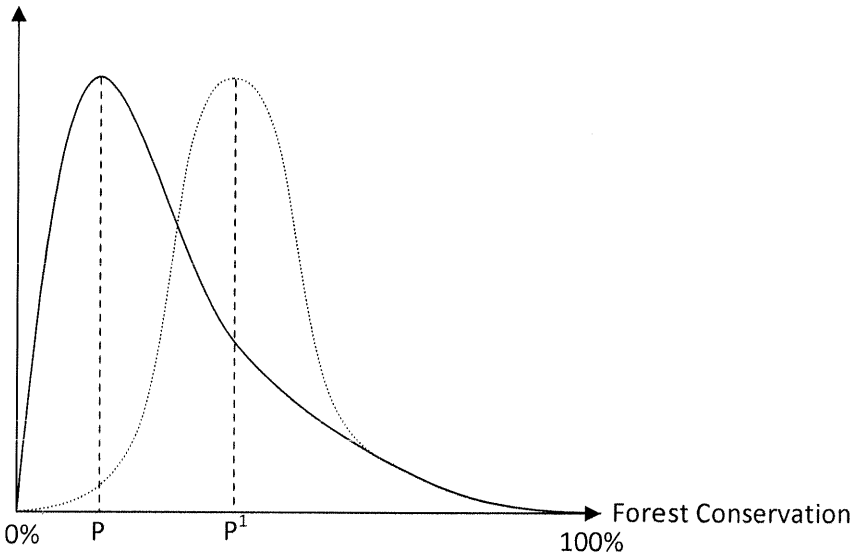


**Figure 6: Policy outcomes with the involvement of local nonprofit organizations**

The global nonprofit organization will work in the same manner as the local organization. However, the level of conservation that the local organizations achieve through their advocacy work will not be sufficient for the international communities. At this amount of conservation, the benefits that the global community derives from the forests are still unrecognized and deforestation occurs past the global socially optimal level when global public benefits are taken into consideration. In order to represent the global community, international nonprofits would form and then attempt to influence public policy and further increase the level of forest

conservation. With the participation of international nonprofit organizations, new policies, $P^2$ in figure 7, would be implemented and forest conservation would increase.

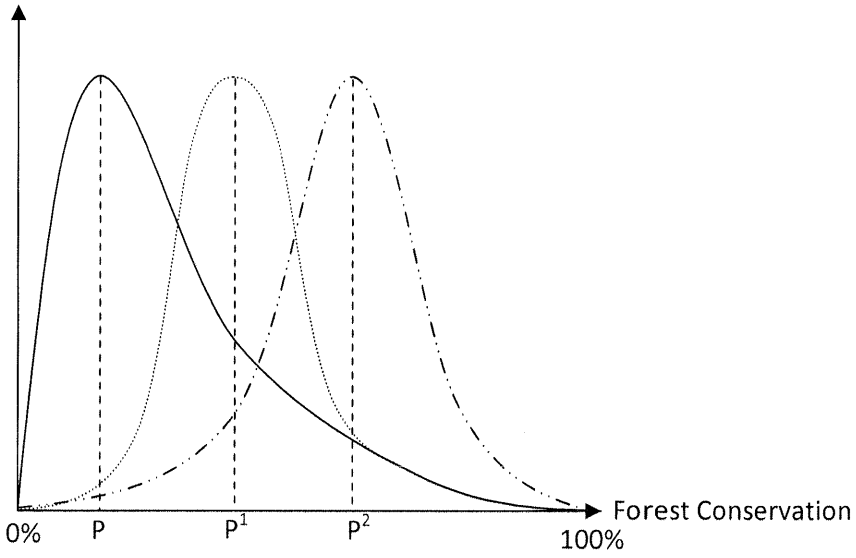


**Figure 7: Policy outcomes with the involvement of local and global nonprofit organizations**

This argument for nonprofit action can also be applied to the international level. When deforestation becomes a global issue, international bodies, such as the United Nations, should negotiate policies to increase forest conservation. Both local nonprofits and international nonprofits will participate and try to influence policy decisions to achieve the optimal level of conservation. Possible policy solutions are discussed below.

Policies that decrease agricultural rents would shift the agricultural rent curve to the left. The point at which the private benefits and costs of deforestation are equal and the amount of forest that gets converted to agriculture (point B in figure 2) would shift to the left. The shift in the agricultural rent curve, however, will also shift both local and global socially optimal points (points C and D in figure 3) to the left, so this type of policy change, though it increases the amount of forests, would still not achieve a socially optimal level.

Another option would be the implementation of policies that conserve a specific amount of forest land. These policies would establish protected areas that are equal to the socially optimal amount of forestland and could be achieved through the government purchasing the land and establishing protected areas such as national parks or through other types of conservation laws. While these laws would meet the optimal amount of conservation, as discussed in the literature review, they also have negative impacts on the livelihoods of communities living in and relying on the forests because they limit access to the forests (Kaimowitz 2003). This would decrease some of the benefits of the forests, and potentially eliminate the private forest rent as forest users could no longer gain profits from the extractive forest products. In this case, local nonprofit organizations would not advocate for the policy because of the adverse effects on the local communities. Global nonprofits, however, might advocate for this type of policy.

Finally, policies that capture the public value of the forests could be considered. This type of policy could include strategies such as community forest management which "moves decisions from the individual level to the community level to incorporate community-level negative externalities from deforestation" (Angelsen 2010). Since the costs of deforestation would be recognized, the amount of forests converted to agriculture would move to point C in figure 1. Both local and global nonprofits would advocate for this type of policy. However, because this policy would not achieve the global optimal amount of conservation, global nonprofits would continue to advocate for more conservation.

## Analysis

### The Strategy of Local Organizations

As international conservation and environmental nonprofit organizations form, they will work to influence policies nationally and internationally to increase conservation to the global optimal amount. As conservation increases past the local optimal amount, the indigenous communities are made worse off. One way that local nonprofit organizations representing these communities can respond is by working together and forming associations to create a stronger voice for the communities. These associations represent their member associations that may not necessarily carry out their own advocacy work or are not able to sufficiently represent themselves in the political arena. These larger associations can then argue for policies that compensate the local communities for the negative benefits that occur as conservation exceeds the locally optimal level. This type of response does occur and can be seen by the following organizations:

**LIDEMA: Liga de Defensa del Medio Ambiente (Environmental Defense League).** LIDEMA is a Bolivian non-profit organization with 26 member associations from Bolivia. According to their website, the organization is a network of organizations that are working to promote environmentally sustainable development policies. As such, it has "become the main reference for civil society in environmental issues in the country" ("Who We Are", n.d.). LIDEMA emphasizes that their work focuses on such areas as human rights, participatory democracy, equity, right of access to information, participation and environmental justice, and respect for the autonomy of member institutions. Other important policies that LIDEMA highlights on their website include the following:

> To promote access to natural resources, giving priority to social sectors poorest and most vulnerable and generating sustainable productive opportunities for them; promote effective and equitable participation of all sectors, with particular emphasis on the most vulnerable; promote respect, appreciation and appropriation of local knowledge and practices and promote their wider application with the approval and involvement of the holders, promoting the benefits arising from their use are shared equitably; encourage the establishment of rights, collective and for the most vulnerable, access, use and enjoyment of natural resources; and participate in international environmental conventions and achieve synergies for implementation. ("Who We Are", n.d.)

Though the information on the website provides only a limited perspective of how this organization behaves, it appears to be a prime example of how local non-profits should act in order to better represent themselves in civil society and influence policy decisions. Organizations such as this give smaller nonprofits a way to be represented in policy discussions as well as a number of other resources to help promote their own goals and missions. Associations such as this will work to strengthen and coordinate the work of their member associations which work on the local and national level.

**COICA: Coordinadora de las organizaciones indígenas de la Cuenca Amazónica (Coordinating body of indigenous organizations of the Amazon Basin).** Similar to LIDEMA, COICA is an association of nine Amazonian indigenous organizations established to address the issue of protecting and conserving the Amazon as well as the preservation of their way of life, which is completely dependent on the survival of the forest. Unlike LIDEMA however, COICA and other similar types of associations are focused more on the protection of the rights of the groups it is representing. However, forest conservation and other environmental concerns are still important aspects of their mission. COICA was established as the overarching organization for nine different indigenous groups, and works primarily on the international level to represent their interests. Most recently it participated in the United Nations' Conference of the Parties 18 (COP18) (November and December 2012) where their goals were to "express and make known

[their] views, rights and new proposals to address the climate change crisis in the world" ("COICA", 2012).

Though it is an international organization (it is comprised of indigenous organizations from nine different countries in the Amazon region), COICA represents the needs of the various indigenous local organizations in the Amazon forest. This is different than the international organizations that this thesis refers to which are *not* founded in the countries, or areas where the conservation problem exists. The objectives of COICA include facilitating communication and cooperation between its member organizations and the people they represent, defending the rights of the indigenous people, campaigning and advocating for the indigenous people, coordinating governmental and non-governmental organizations in the Amazon region, and ensuring that the indigenous people and their cultures are recognized and represented ("COICA", n.d).

If local nonprofits create associations to act on behalf of the smaller member organizations, they can create more leverage in advocating for policies that take into account the needs of indigenous people and implement conservation strategies that do not make them worse off. Since deforestation continues to be a major concern for both local and global communities, it can be argued that neither the local nor the global optimal levels of conservation have been reached. Therefore, local organizations can still work towards conservation policies that take into account the needs of the local communities and do not make them worse off. If, however, the international nonprofits succeed in achieving the optimal level of conservation, hence, making the local communities worse off, the local organizations should lobby for policies that compensate the local communities for the costs of conservation. With these types of policies, the global community will pay the local communities to conserve the forests. Locals will receive

compensation for the opportunity costs of not being able to use the forests. The global community will pay for the benefits they receive from the forests, such as the preservation of biodiversity and reductions in carbon emissions.

This type of solution can be illustrated in the context of the previous economic model. If the conservation level is at point C in figure 4 (reproduced below), international nonprofits will continue to work towards the conservation level at point D. For every additional unit of land that is conserved past point C, however, local communities are made worse off. Because the benefits that the global community receives (as conservation moves from C to D) are greater than the costs that the local communities incur, conservation will continue until point D. As benefits accrue to the global community, they can compensate the local community for the costs as conservation moves from point C to D. In other words, the global community is paying for the services that they are receiving from the standing forests.

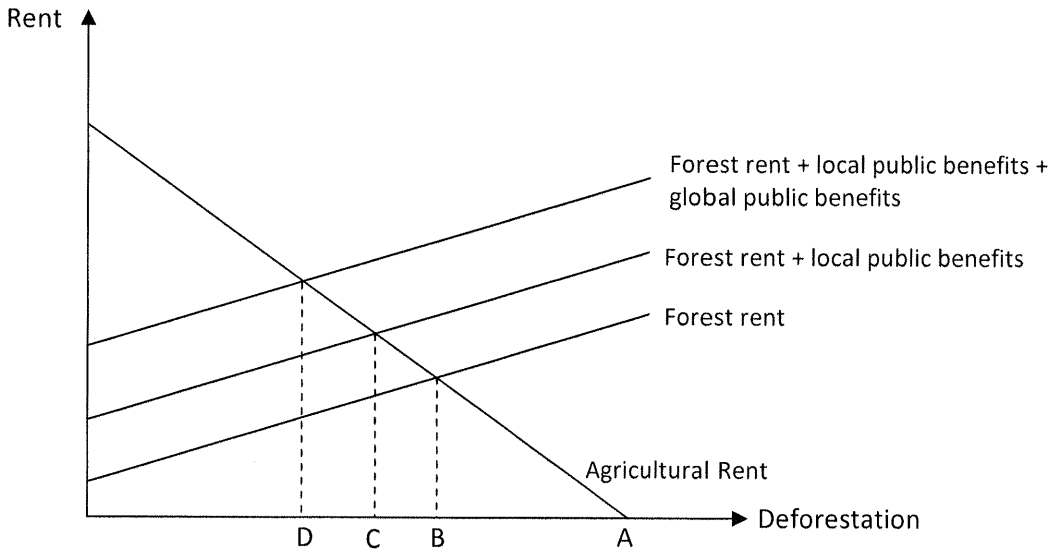


**Figure 4: Deforestation outcomes with local and global public benefits**

The local nonprofits can work towards this outcome by advocating for policies that give property rights to the local people. Once property rights are established, locals will be able to charge for their land to be conserved. A forest user, with rights to their land, will conserve a unit of their land if the payment they receive for that unit is greater than the benefits they receive from having full access to and no limitations on how they use that unit of land. A member of the global community will pay for a unit of land to be conserved if the benefits of conserving that land are greater than the costs of conserving it (the price that the land owner is charging to keep the land as forest).

In addition to advocating for policies that provide compensation to local communities for increased levels of conservation, the larger associations, such as LIDEMA and COICA, can help their member organizations better coordinate and organize themselves. As these organizations' ability of to influence policy increases through their collaboration, the global community may become aware of the negative impacts that conservation has on local communities. The global community will better understand the full costs of conservation, which include the costs that the local communities face as conservation levels surpass their local optimal level.

In terms of the economic model, these costs are in addition to the costs of conservation from forgone agricultural profits. Until these costs are recognized in the market through some sort of payment by the non-local people, they remain external. As conservation moves to the global optimum and the international community does not compensate the local population for the conservation, they are, in effect, free riding; they receive the benefits that forests provide without having to pay. Because of the public goods nature of forests, the global community cannot be excluded from these benefits. If these costs are recognized by a payment from the international community to the locals, this will cause the demand curve for deforestation to shift

right. The optimal level of conservation will decrease as a result. Assuming that conservation started at the optimal level (Point D), conservation will decrease from point D to D' in figure 5.

International nonprofits and the global community will respond by advocating for policies that achieve a lower amount of conservations than they would have before the real costs of conservation were realized. This is a result of the actions of the local nonprofit organizations representing the voices of their communities.

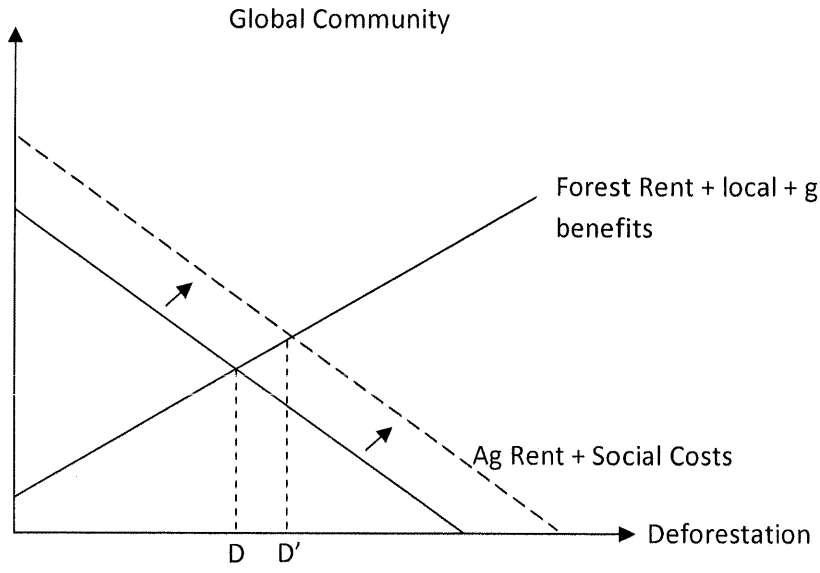


**Figure 4: Conservation with the presence of social costs**

## International Nonprofit Action

**Friends of the Earth International (FOEI).** The above scenario is a potential outcome since international organizations have begun to include indigenous and local communities in their objectives and as part of their conservation plans. An example of this is Friends of the Earth International (FOEI), which emphasizes social justice, respect for human rights, equity, and the empowerment of indigenous people and local communities in their mission statement ("Our Vision and Mission", n.d.). On their website, they discuss solutions to forest conservation and

specifically state that "conservation mechanisms that exclude or harm local communities also must be ended." From their website, it appears that FOEI is well aware of the consequences that conservation can have on local communities. Furthermore, they state that they actively work with local communities to achieve conservation as well as to defend the rights of these communities to the forest resources as well as their land. They also work with the communities on advocacy projects both nationally and internationally ("Forests and biodiversity", n.d.). However, according to the information outlined on their website, FOEI does not recognize that the optimal amount of conservation does, in fact, impose costs on the local communities. Rather than concluding that such "mechanisms" of conservation must be ended, they could adopt strategies that involve ensuring just compensation for the costs of conservation that many of these communities must bear.

**Greenpeace International.** Another organization that includes local communities and organizations in their plans is Greenpeace International. This organization recognizes the need to involve forest communities in the conservation process and has worked with various indigenous groups in their projects. According to their website, they have helped communities demarcate their lands and establish eco-forestry activities, and they have represented these communities on the international level. They state that they "provide a global platform through which forest communities can send their messages to the world." They also state that they have worked with local nonprofit organizations within those communities as well. For example, they have started advocacy projects with local communities to help them gain international attention, and once started, have given the leadership of these projects to the local organizations ("Forest Communities", 2011).

The work that Greenpeace does to help demarcate the lands of local communities and establish property rights will allow these people to be compensated for any costs they may incur as conservation increases past their desired level. As discussed above, if these projects are successful, locals will be able to charge for the use of their land and capture these costs, and the international community will no longer be able to free ride.

**The Nature Conservancy (TNC).** The Nature Conservancy lists "respect for people, communities, and cultures" as one of their values. They explain that conservation is dependent upon the participation and involvement of people and partners who are directly connected and concerned with the areas where TNC works. According to their website, they "respect the needs, values and traditions of local communities and cultures, and forge relationships based on mutual benefit and trust. Furthermore, they

> Demonstrate respect by committing to local, on the ground involvement with people, communities and cultures, and with awareness and sensitivity to their economic realities [and] work collaboratively with all sectors of society, including indigenous people, to develop practical conservation solutions. ("Nature Conservancy Values", n.d.)

While this is only a small sample of international conservation organizations, it demonstrates that the global community does recognize the importance of local communities and the costs of conservation that these communities face, especially if these people are not considered when solutions are being created and implemented. Furthermore, in her article "Global Civil Society and the Distribution of Environmental Goods: Funding for Environmental NGOs in Ecuador," Lewis argues that despite the conflicts between the northern and southern views on environmental issues, the "South's agenda [has] made it to the UN" (Lewis, 2011). Even though international organizations advertise goals and objectives that emphasize the inclusion of local communities, it does not necessarily mean that they are working with or

respecting these communities. In his discussion on the relationships between large conservation NGOs (specifically the World Wildlife Fund, Conservation International, and The Nature Conservancy) Chapin (2004) draws attention to many instances in which these three organizations failed to cooperate with local and indigenous communities. In many cases, these people were completely left out of their conservation plans.

**Local and International Organizations Work Together**

Despite the differences in conservation goals, we see that international organizations and local organizations work together. Because both organizations want more conservation than the market would provide, it makes sense that they would work together up to a certain point. Once the level of conservation reaches the point that satisfies the local communities, however, the goals of the two organizations will diverge. At this point international organizations will continue to advocate for more conservation, but local organizations will not want any more conservation. The partnership of the two types of organizations will no longer make sense. If the two organizations continue to work together despite their differing conservation goals, the international organization will potentially ignore the needs of the local communities.

However, there are incentives for the two types of nonprofits to partner. International nonprofits have an incentive to partner with local organizations because the local organizations are much closer to the issue; they have more information about the issues on a local level, and they can also help global organizations complete projects on the ground. International organizations can work with these organizations to more effectively achieve their goals. This seems to be the case in many instances. For example, Conservation International (CI) partners with many non-governmental organizations stating

> We view our fellow conservation organizations as allies, not competitors. Since 2001, we've provided $90 million to 1,200 nongovernmental groups uniquely and strategically positioned to get conservation done. Those numbers will keep going up ("Partnerships", n.d.)

Many of the organizations that CI partners with are local organizations in the communities where conservation efforts are taking place. The World Wildlife Fund (WWF) and TNC also partner with other nonprofit organizations as well. Both TNC and WWF state that they work with organizations with similar goals that range from large international nonprofits, to small local nonprofit organizations ("Partners in Conservation", n.d. and "Empowering Communities", n.d.).

Local nonprofits also have incentives to partner with international organizations. This type of partnership could give the local nonprofits access to more funding and resources, especially given the size of many international conservation organizations. They may be able to accomplish more in terms of influencing public policy nationally and internationally. However, this type of partnership is done at a cost. As local organizations look to international organizations for funding and for partnership, they must change their goals and missions to align with those of the international organizations. As a result, the voices and needs of the local communities are diminished.

Peter Frumkin (2005) discusses this dilemma and argues that there is not enough communication from the "periphery" of the nonprofit sector, such as small, local organizations to the "center", such as funders and influential international organizations. Rather than gaining information and knowledge from the local organizations, the funders and international organizations are rather influencing the goals and missions of the local organizations.

Furthermore, he argues that nonprofit organizations need to protect their own goals and mission statements rather than allow their missions to be changed by other organizations.

In her analysis of environmental organizations in Ecuador, Lewis (2011) found that 50 percent of the organizations that she interviewed received foreign funding from sources such as foundations, international NGOs and foreign governments. She also found that changes in the organizations issue areas were due to funding availability, and further argues that partnerships with international NGOs limit the ability of the recipient organizations to set their own goals. Goals change according to what the funders dictate.

As local nonprofits change their goals and missions to match their international partners, the needs of the global community are strengthened. There are now more organizations advocating for the needs of the global community and fewer advocating for the needs of the indigenous communities. As this occurs, the voices of the local people become even less represented as the local nonprofits act on behalf of the international nonprofits.

To gain a voice in the discussions on forest conservation, especially since the issue (along with climate change) has become a global concern, the best option for local nonprofit organizations is to continue collaborating and partnering with other local organizations that have similar goals. As these partnerships are made, as in the case of COICA and LIDEMA, these organizations will have a stronger voice and local communities can be better represented, especially in the international context. These organizations can even grow into international organizations, such as COICA, whose primary goals are the representation of indigenous communities as well as human rights and environmental justice.

As local communities become better represented in discussions on climate change and conservation policies, a level of conservation closer to what local communities want would be achieved. Furthermore, with more voices represented, it is possible that solutions and policies could be created that would achieve a level of conservation that the global community wants, while also compensating local communities for the costs of conserving forest past their optimal level. Nonprofits, such as Greenpeace International, have already started doing this through helping local populations acquire property rights to their land. This strategy allows the local people to decide for themselves how much conservation of their land is worth to them and obtain compensation for the costs of the additional conservation that the global community desires. A more equitable solution is reached.

## Conclusion

In the past few decades, nonprofit organizations have become an important player in environmental discussions, especially in the case of deforestation and climate change. They play an essential role as they advocate for policies and solutions and represent people left out of the discussions. As deforestation has become a global issue, however, conflicts over solutions have arisen between the global and local communities. While forest conservation benefits the international community through increased biodiversity and carbon sequestration, local and indigenous communities can be made worse off from conservation policies as the policies limit their ability to use the forest resources. This is detrimental as many of these people rely on the forests and their resources to survive and maintain their traditional ways of life.

Nonprofit organizations are established to represent the interests of these two communities and while it appears that these organizations share a common goal –preventing

deforestation and overall environmental conservation –their main objectives differ. Many international conservation organizations are primarily concerned with conservation, while maintaining human rights and environmental justice are a secondary goal. Local nonprofits, on the other hand, are concerned with protecting the rights of the people they represent. However, as environmental problems, such as deforestation, begin to threaten those rights and their ways of life, these organizations have become concerned with environmental issues. Given the differing goals of these two types of organizations, it is expected that they would advocate for different levels of conservation.

In their pursuit of conservation policies that will achieve their conservation goals, both types of nonprofits have incentives to partner with each other. For international organizations, these incentives come from the increased knowledge that comes from the local people and organizations that are closer to the issues as well as the ability to better carry out conservation efforts. The incentives for local organizations to partner with international organizations include funding and other resources from the international organizations as well as a chance to be represented in international discussions.

Though international organizations do recognize the need to include indigenous and local communities in their strategies, and though some do, in fact, work with local groups, it is not always in the best interest of these local communities to create alliances with international organizations. There is a risk that their goals will be influenced by their international partners and they will lose their individual voices. In order for equitable solutions to be achieved, all communities must be equally represented. If local nonprofit organizations are being influenced by international partners, their ability to fully represent the local people is diminished. The voice of the international community would dominate all policy discussions and advocacy efforts.

Local organizations could, rather, partner with each other to increase the strength of their advocacy efforts both nationally and internationally. If these organizations can form trans-national partnerships with likeminded local organizations and form international organizations from their grassroots efforts, they will contribute equally strong voices as other international organizations.

Once the needs of local communities are brought to light, the global community will recognize the full costs of forest conservation –the costs that the local people face as they lose access to vital resources that the forests provide. This will lead to the development of strategies aimed at providing compensation for these costs. Local and international nonprofits alike can then work towards advocating for such solutions and creating their own strategies and programs that provide this compensation. Equitable solutions such as this, however, will only be achieved when a variety of voices and opinions are represented. The roles that nonprofit organizations play are imperative to increasing representation, especially of those who are directly affected by the environmental threats and their proposed solutions.

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