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The Ethiopian Orthodox Tewahedo Church Forests and **Economic Development**

The Case of Traditional Ecological Management

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Abstract

Remnant Afromontane forests in northern Ethiopia are under threat from development pressures both within Ethiopia and from international interests. These biodiversity hotspots are currently protected by the Ethiopian Orthodox Tewahedo Church (EOTC), which views the forests as sacred. The academic literature is divided on how to provide food security in this drought-prone nation. This article examines these tensions in the academic literature before turning to the eco-theology of the Ethiopian Orthodox, which both protects these forest fragments and strengthens the communitarianism of traditional Ethiopian society. A case is then made for the continued management of these forests by the EOTC.

Keywords: food security, eco-theology, sustainability, famine, Orthodox Christianity

Introduction

Remnant eastern Afromontane forests survive in the northern highlands of Ethiopia, which are currently protected by the Ethiopian Orthodox Tewahedo Church (EOTC). These "church forests" (as they are known) are biodiversity preserves of critical importance for the future of Ethiopia, and also spiritual enclaves that are home to churches, monasteries, and other ecclesial lands actively managed by the EOTC clergy, who maintain the forest resources in a sustainable way for their subsistence needs. The active management of these forests for centuries by the EOTC have not diminished their ecological value. This is because the stewardship of these forests reflects a body of knowledge gathered from intergenerational and adaptive management by those religious leaders living on these lands, representing a form of traditional ecological knowledge. More precisely, since this traditional ecological knowledge is deeply informed by religious attitudes toward nature that are particular to the EOTC, it is more properly identified as a religious-based traditional ecological knowledge. Outlining the religious worldview of the EOTC as it informs its traditional ecological knowledge is one aim of this article.

There is, however, another matter that complicates any discussion of the EOTC. An emerging discourse in the agricultural science literature is portraying the EOTC as hindering the economic development of Ethiopia because of its role in the conservation of these remnant forests. It is also sometimes claimed that the EOTC represents a direct threat to food security in this drought-prone nation for this same reason. This is, in itself, a most curious happenstance. There is a divergence in the academic literature with conservation biologists lauding the efforts of the EOTC in protecting these biodiversity hotspots, and certain agricultural scientists taking a harshly negative view of the same. This tension is also reflected in the politics of development as it is discussed in Ethiopia and by the expatriate community.

These, then, are the conflicting contexts in which we will discuss the eco-theology of the EOTC. In presenting and evaluating the arguments of each side, a case will be made for the continued management of these remnant forests by the EOTC. It is a proposal that not only furthers biodiversity conservation efforts, but also provides for and strengthens the long-term food security of Ethiopia. We hope this article will help bridge the impasse that currently divides the academic community about how to regard the church forests of the EOTC.

The Conservation Biology Discourse

Around 21,000 dry Afromontane forest fragments remain in the northern highlands of Ethiopia, ranging in size from 3 to 300 hectares. This represents less than 5% of what used to exist, due to forest conversion "into farms and grazing lands over centuries" (Bongers et al.: 39). The remnants have survived to the present day because their protected status within the EOTC (Cardelús et al.: 915). Each forest is home to a church, a monastery, or some other

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¹ Ritler examined historical records for land use in northern Ethiopia, and noted that, by the end of the nineteenth century, severe deforestation had almost entirely denuded the landscape. Native forests were only found to exist in inaccessible regions or as "sacred groves" around churches, which were protected from deforestation by religious taboo (2003: 40, 44, 59, 82; see also Ritler 1997: 20). The deforestation in all other areas was so severe that an exotic tree species was intentionally introduced (eucalyptus) in 1895 to provide the people with a source of firewood (2003: 98). It quickly became invasive, and the extraordinary decision was made to try to control its spread. "In 1913 [Emperor] Iyasu decreed that two of every three eucalyptus trees were to be uprooted because the negative ecological effects were already being felt" (2003: 98). This, however, proved ineffective.

² Ritler found that "it was possible to establish a [historical] connection between landscape, tree stocks and ethnic (or ethnic/religious) affiliation" in his research of historical records from the late nineteenth century and early twentieth century (2003: 64). Specifically, he found that the Amhara and Tigray Orthodox people, who favored agriculture, had preserved remnant native forests around their churches (2003: 58, 59). These forests were carefully worked by the monks or clergy for their own modest subsistence needs (with surpluses from dead or fallen stem or branches sold to the communities), and special care was taken to prevent soil erosion with hedgerows planted as windbreaks and rainwater runoff controls (2003: 39). In contrast, the lands occupied by

ecclesial building; in the larger forests, wandering hermits, known by the locals as "invisible saints," who pray and intercede on their behalf before God, live secluded within the forest interior (Buntaine and Vander Veer). It is because of this special relationship to the EOTC that, "the local people perceive these forests as holy places" and refuse to denude the landscape of resources even in times of drought and famine (Bongers et al.: 39).³ In turn, the priests perceive these forests as giving "prestige" to the church leadership (Wassie et al. 2005: 351). Notably, one priest in an interview, Abba Melake Hiwot Asnakew, describes the church forests as the "emblem" of the EOTC (Buntaine and Vander Veer).

Yet the place of these forests in the life of the EOTC, and the communities they serve, is not just one of proximity. Frankincense and myrrh, plants native to Ethiopia, are sustainably harvested by the clergy for liturgical incense, and it is not uncommon for some services to be conducted outdoors in the forest to accommodate all the gathered people (Buntaine and Vander Veer). Church forests are also exclusive burial places for followers where the loved ones are remembered (Wassie 2002). But the catalogue of how the forests are managed by EOTC does not end there:

Interviews of these people show that the forests provide a wide range of services to the community, such as wood for maintenance and reconstruction of church buildings, charcoal required for the internal church services, products for making sacramental and sacred utensils, food and traditional medicine for monks, hermits and church students, some plants to make ink and dyes, income generation by selling dead and fallen trees/branches to the church followers, protection from strong wind, storms and soil erosion, serve as classrooms for the traditional church school, create privacy and tranquility for hermits and monks, provide shade and conditioned atmosphere for religious festivals and meditations outside the church buildings, provide sweet and pleasant smell around churches, and create beautiful scenery, impression and contemplation for prayers, give grace and esteem to churches and play guarding role, indicate the presence of churches in the area from a distance, reminding Christians passing by to bow, serve as platforms for followers to discuss religious and social issues, used as symbols and examples in the teaching and preaching of the Gospel, songs, hymns and canonicals ('Satat') (Bongers et al.: 41).

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Muslim communities were found to be almost entirely denuded of trees, owing to fire-burning to promote grass germination for livestock grazing (2003: 64). Nyssen et al. also found through an analysis of historical photographs that many of the church forests managed by the EOTC have not had any deterioration over the last 99 years (167). The same cannot be said for non-religious forests, where Balana et al. found that the pressing need for fuel-wood has led to deterioration of these forests despite governmental efforts at reforestation (1302).

³ Perhaps the starkest example of this religious reverence for the land is to be found on the Zege peninsula of the southern shore of Lake Tana in Amhara, where it is prohibited to cut down the trees, plough the land, or keep livestock. This is to honor a covenant (*kidan*) made in the fourteenth century between God and a wandering monk named Abune Betre Maryam. "The covenant states that so long as nobody cuts trees, ploughs the land, or keeps large animals, God will provide the people of Zege with a living and protect them from natural disasters and wild animal attacks" (Boylston 2018: 1). Today, Zege is densely forested, and home to nine church-monasteries – the people make their living selling coffee instead.

The forests are important to the people of Ethiopia in other ways too. In terms of ecosystem services, they protect fresh water springs, which are shaded from the sun and are less subject to the rigors of evaporation due to the forest canopy; they are also habitat for pollinator species needed for the agricultural efforts of the surrounding community (Lowman et al.; Cardelús et al.). Additional benefits for the people come from sustainably harvested wild honey, wind breaks to reduce topsoil erosion, carbon sequestration, and supplying traditional medicines (Robinson). They are also habitat to native species that have evolved to be drought-tolerant. Because of this, they are a vital seed-source for native plants important to food security and the future of Ethiopia's natural heritage. Wildlife such as the grivet monkey, the white cheeked-turaco, and many other species of the Afromontane biotic community make their home within church forests as well. In short, they are biodiversity hotspots that serve as sanctuaries of many plant and animal species that have almost disappeared in most parts of northern Ethiopia (Wassie 2002: 3; see Bingelli et al.). Because of this, the forests represent an irreplaceable genetic ark for any future restoration efforts. "They are native seed banks for the future [of Ethiopia]" (Robinson; see Wassie 2007).

Researchers have begun to focus on the interdependency between these forests and the EOTC with respect to conservation, with the aim of further empowering the people to protect these biodiversity hotspots (Lowman et al.; Cardelús et al.). It is hoped that modern science and the religious-based traditional ecological knowledge of the EOTC can come together in restoration efforts to benefit all of Ethiopia. To this end, studies have identified a very noteworthy correlation: "Church followers are very committed to develop the forests, improve their quality and help in extension of the forests. In contrast, the same people are hardly motivated to help governmental institutions in reforestation programs" (Bongers et al.: 41). This is a most significant finding. There is something with respect to their status as holy sites that motivates the people in ways that economic self-interest simply cannot. It is for this reason the study authors go on to write: "we conclude that the ecological and social status of church forests provide an excellent *last opportunity* to conserve natural forests, and to restore degraded areas into productive and diverse natural forests, in the unique mountainous landscape of Northern Ethiopia" (Bongers et al.: 43, emphasis added).

The EOTC is actively assisting scientists in studying reforestation of the Afromontane remnants (Wassie et al. 2009a: 117), and are working with the Alliance of Religion and Conservation (ARC) through their own Development and Inter-Church Aid Commission (EOTC-DICAC), as well as other non-governmental organizations, on reforestation initiatives to further protect and expand these biodiversity hotspots. Through the efforts of these organizations, the EOTC has also begun to redress the degradation of these forests through the construction of protective walls to prevent livestock grazing of the understory, and the removal of invasive exotics such as Eucalyptus. One report states:

Local Orthodox priests now call them the "evil tree," not only because they are invading their forests but because Eucalyptus trees require up to four times more water than native tree species. They're also toxic to most native wildlife and produce none of the traditional medicines that local people have come to rely on. The invaders have become so successful that they now threaten Ethiopia's rural water supply, native biodiversity, and cultural heritage (Lowman; see also Wassie et al. 2009b).

In summary, the church forests are biodiversity havens providing critical ecosystem services for the agrarian communities they serve. Integral to their conservation is the status of the church forests as holy sites for the EOTC, which inspires the people to treat them reverentially and work for their conservation and restoration. Public acceptance of environmental policy is often the *key* to any program success; exploring the eco-theology that substantiates this powerfully eco-centric worldview is one aim of this article. But first, as mentioned earlier, a competing discourse in the academic literature casts the EOTC as part of the problem, rather than integral to the solutions for Ethiopia's sustainable future. That position must be laid-out in its own term. This article will then attempt to reconcile these concerns with respect to food security, before returning to the subject of the eco-theology of the EOTC.

The Agrarian Science Discourse

A leading figure in Ethiopian agricultural science is Temesgen Gebeyehu Baye of Bahir Dar University. In a 2017 peer-reviewed article, he discusses the problems of persistent poverty in rural Ethiopia, and he lays the blame at the EOTC for their systematic oppression of the people. The author substantiates this claim with an astonishing quote from an Ethiopian historian, Aläqa Atsmä-Giyorgis Gäbrä-Mäsih (Atsemé): "The [Tewahedo] clergy have rendered this rich and ancient land [of Ethiopia] ignorant and sterile. They are the source of all evil, the foundation of ignorance" (2017: 424). It is a sensational claim, and given without any historical context. Atsemé is not a contemporary figure but was a nineteenth century Catholic missionary who was frustrated with the evangelical work of the competing EOTC over the conversion of the Oromo people (Zewde 2002: 131). It is not an unbiased source and has no direct relevance to conditions in Ethiopia today. Nevertheless, Baye uses the quote to support his central claim that "the cause of the poverty of the peasantry" in Ethiopia resides with the EOTC (2017: 424). The specific charges are that the EOTC opposes efforts to modernize the agrarian economy:

Religious and cultural issues contributed in the making of Ethiopian peasantry poor and to be indifference [sii] to the material wealth. Orthodox Christianity to some extent had a role in discouraging the people from working hard and accumulating capital . . . (Baye 2017: 424).

This is where his case against the EOTC comes into focus. It is true that the culture of the rural peasantry is largely defined by the liturgical calendar of the church, and its economy is subsistence agriculture. It is also true that this traditional lifestyle is not compatible with capitalist development since the acquisition of material wealth is not a foremost concern when compared to social standing, community responsibilities, and relationship to divine realities: "People were preached to engage in socially approved activities which had more religious and cultural implications than material life and wealth" (Baye 2017: 424). In other words, communitarianism defines rural life in EOTC areas, and Baye sees it as standing in the way

⁴There is considerable debate in the anthropological literature about the true nature of communitarianism in traditional Ethiopian society. Levine, for example, suggests that the overt displays of communitarianism in such customs as ostentatious shows of hospitality, cooperative working each other's land within a community (wanful), selfless cooperation on large work projects for the benefit of another without reciprocal exchange (waffar), and the eddir welfare given by the community to assist families in the event of death, illness, unemployment, or

of the modernization of the agrarian economy. What is needed, he argues, is a capitalist ethic that promotes the accumulating personal wealth through such means as wage labor. But traditional communitarian life does not allow this, since, as he writes: "Even still today, there are many Holy Days in a year [when one does not work]. For the Christians, there are only a few working days" (2017: 424).

Another fault Baye finds with the culture of the EOTC is that the religious communitarianism actively destroys accumulated wealth that could have been sold with the profits reinvested in further capitalistic production. Instead, the people freely share agricultural surplus during religious festivals, where a wealthier person seeks to "to show his love" for his neighbor through lavish feasts in demonstrations of magnanimity and generosity (2017: 425). At the heart of this communitarianism is the EOTC and the church forests, the focal points for the religious festivals. Baye (2016) argues for more governmental intervention on the lands held by the EOTC through hereditary trusts (known as *Gult-Rist* rights), which he says is a carryover from the feudalism that typified land tenure prior to the 1974 DERG revolution (2016; see also 2013). This is necessary, he argues, to modernize the economy in ways compatible with a cash economy and globalization. But he concludes that there has not been the political will to carry this out. "The government failed to commit itself to create conducive environment and conditions that promote agricultural transformation and its international interconnection. The country had been affected very little by external factors like market, new inventions and techniques" (2017: 426).

The necessary context in which to appreciate Baye's commentary is the long history of drought and famine which has plagued Ethiopia. Seven major famines occurred in the twentieth century, with 30 major outbreaks in the 400 years before; the Great Famine of 1888-1892 reportedly resulted in the death of a third of the population (Woldemariam: 37). With its growing population of 102 million people, Ethiopia is particularly vulnerable to another humanitarian disaster of this kind. The overriding concern of the agricultural scientists, understandably so, is to provide food security for the people in this drought-prone nation. From their perspective, the EOTC is seen as preserving an inefficient subsistence economy that is vulnerable to famine, and this is why the EOTC is perceived to keep the peasantry ignorant and disempowered.

However, it must be noted that the accusations against EOTC presented above are not substantiated with scientifically generated data or presented in a research discourse comparing, for example, Muslim, Protestant, and Orthodox communities in similar geographical and ecological locations and socio-cultural contexts. No acknowledgement is also given to activities that promote and strengthen communitarianism within the subsistence economy, as contrasted with a cash economy. It all appears to be merely editorial opinion embedded within a scientific paper. In addition, it is a logical fallacy to ascribe the illiteracy of rural people, who

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imprisonment of the head of household, are actually "superficial levels of interaction" that conceal true individualistic sensibilities in private affairs (247, 277). Others, such as Malara and Boylston, suggest that individualism and communitarianism exists dynamically within evolving relationships of political hierarchy and private inclinations toward social love, care, and protection of others within Ethiopian society (see also Malara). This article takes no position on the underlying psychological negotiations of power taking place within Ethiopian communitarianism, leaving this debate to others.

exist outside the formal education systems in urban centers, as being caused or perpetuated by the one social institution that does look after these people, the EOTC; while the EOTC does promote childhood education through its limited resources, it is nonetheless the responsibility of the government to extend formal social services to these rural areas. And while the hope of our article is to break through this ideological impasse between the conservation biologists and the agricultural scientists, these discourses do not exist in isolation. It is taking place within a political environment that is also decidedly negative against the EOTC.

The Political Environment

The stories about the EOTC in the news media have been exceptionally alarming. One headline from May 17, 2017, reports that, "TPLF Declares War on the Ethiopian Orthodox Church" (Aklilu). The TPLF (Tigray Peoples Liberation Front) is a powerful political party of the ruling parliamentary coalition of the Ethiopian legislature. The nature of the animosity, as reported by this article, is a belief that the traditionally Orthodox Amhara people, who ruled Ethiopia prior to the DERG revolution, discriminated against the Tigray people. The article, however, points out that, "the TPLF does not give concrete evidence of any documented history that Amhara have subjugating [sic] the Tigray people specifically for their race." Notwithstanding this historical hostility, the real point of contention is over church lands which the TPLF wishes to expropriate in the name of development. The focal point for this "war" is the 800-year-old Waldeba monastery in the Gondar region of northwest Ethiopia. The government is making a large capital investment in the Wolkkayite Irrigation Project, which will include a dam for the Zarima river that will flood EOTC lands (Wamath). In this dispute, the EOTC is seen as standing in the way of modernization, and the hostility has spilled over from inflammatory rhetoric into reports of violence and bloodshed (ESAT News 2017a, 2017b).

There are Ethiopian voices, however, that show that another way of development is not only possible, but necessary for true food security. Yebio Woldemariam, on one hand, is part of the chorus that sees the EOTC as perpetuating ignorance and backwardness among the rural population - he specifically ridicules such traditional customs as adding salt (an electrolyte) to season coffee, using a pinch of soil from thousand-year-old monasteries as a curative for medical ailments, and relying on holy water to ward off an "evil vibe" (90). He also echoes the narrative that the EOTC has kept the peasantry "locked in [a] vicious cycle of poverty and ignorance until the outbreak of the [1974] February Revolution [by the Marxist DERG]" (90). Woldemariam, like Baye, sees the DERG as overthrowing the feudalism that perpetuated EOTC land tenure, thereby beginning the process of ending the exploitation of the peasantry, as well as freeing disenfranchised religious minorities such as Muslims (117). Again, we see the claim that the EOTC is somehow perpetuating illiteracy and ignorance, as well as persecuting others, though these accusations are never substantiated with specific examples. It also seems, once again, that the state of education in rural areas is being uncritically conflated with the EOTC, with whom the people are identified, instead of blaming the government for its lack of educational outreach to under-serviced regions - a situation made worse by historical animosities in this pluralistic nation.

Nevertheless, despite all this, Woldemariam disagrees with Baye over agricultural modernization – or to be more accurate, what is called modernization by those with an

economic stake in the government policy of leasing large tracts of land to foreign interests. Woldemariam remarks that these policies are "not going to be helpful to the majority of Ethiopians who are engaged in subsistence agriculture" (220).5 He further notes that these foreign investors are only looking for a lucrative return on investment, and that the Ethiopian people do not benefit from these contracts. The World Bank boasts that investment in Ethiopia has resulted in stunning and sustained GDP growth over the last decade, with Ethiopia claiming the world's fastest growing economy in 2017 (see Gray). Yet this has not translated into benefits for the people themselves as measure by the Human Development Index, where Ethiopia ranked as the 14th worst nation in the world in the UN's Human Development Report. The discrepancy results from the fact that GDP measures economic activity in a nation, not the economic benefits that remain after foreign investors take the monetary returns for themselves. Often, all that stays within the nation is what is paid for wage labor which, in the case of Ethiopia, is among the lowest in the world – a fact that has attracted foreign investment in the first place (Assefa). Journalists are also beginning to question whether these foreign investments in agriculture are for Ethiopia's benefit or for the domestic food security of the financing nation (Vidal).

There is also another consequence of this modernization policy that Woldemariam highlights. The Ethiopian peasantry often need to be dispossessed of ancestral lands in order to give title to these foreign interests. This takes place under resettlement programs that relocate the people to sub-municipal areas that are intended to provide health, education, and social services, as well as retraining them to transition from subsistence agriculture to low-skill wage labor jobs (200). But often the result is that the people become crammed into "oppressive spaces and unhygienic conditions" in these camps (200). This is a concern echoed by the Oakland Institute, an independent thinktank, which has published a 2013 report on political repression of the disenfranchised poor in Ethiopia. Foreign aid, they found, accounts for more than half the national budget in Ethiopia, with the funds earmarked for development projects that benefit the foreign donors:

A key element of the development strategy is the relocation of 1.5 million people from areas targeted for industrial plantations under the government's "resettlement" program. With more than 80 percent of the Ethiopian population dependent on agriculture and pastoralism for subsistence, the disruptions caused by the villagization [resettlement] program are resulting in increased food insecurity, destruction of livelihoods, and the loss of cultural heritage" (1).

These forced relocations, they found, also violated human rights. But new political leadership in Ethiopia holds the hope for peace, shared prosperity, and new inclusive approaches to redress the varied social and economic problems in this nation.

⁵Woldemariam also recommends government support for community-based seed producer cooperatives in order "to complement the production of seed by the nascent private seed industry" (216).

⁶ Ethiopia is ranked #174 out of 188 nations, well below Haiti, Afghanistan, and Côte d'Ivoire, and within the group of nations classified as having the lowest human development.

Development Alternatives

All this raises the question of whether there is another way to achieve food security. Woldemariam argues: "If the objective is to increase food production and accelerate economic growth, the government is best advised to rely on its emerging business class and technical entrepreneurs [rather than targeting the peasantry] no matter how arduous the path may appear" (220). To this end, a recent critical review of irrigation developments in Ethiopia reports that only 5% of the country's irrigable land is served by formal irrigation systems. The rest is rain-fed agriculture which relies on traditional spate irrigation, "which usually use diversion weirs made from local material and needs annual maintenance. The canals are usually earthen and the schemes are managed by the community" (Haile and Kassa: 266). It is another example of traditional ecological knowledge. And while the current emphasis is on large scale capital investments to attract foreign investors, the authors argue that the best path toward sustainable development and food security would be through the community-based water associations, which could be augmented with modern "household water harvesting and microirrigation technologies" (Haile and Kassa: 268). This would directly benefit the subsistence farmer, and it would also help assure food security, environmental resilience, and even alleviate poverty throughout Ethiopia (Haile and Kassa: 266).

Similar recommendations are made by Fantu Bachewe. He too points to the pivotal role of irrigation for the rural subsistence farmer. "In an economy where 85 percent of the population is engaged in rain-fed agriculture and where drought had recurred for the past three decades, irrigation is an important way to improve the lives of many, if not most, of Ethiopians. Developing irrigation infrastructure [within rural communities] can play an important role in the effort to improve this sector" (33). Bachewe points out several key barriers that must be overcome, including a lack of purchasing credit as well as little knowledge of modern technological advances (156). Most critically, he writes, is the lack of modern inputs "such as fertilizer [which] requires, among other things, the introduction of simple agricultural machinery that help alleviate labor bottlenecks or facilitate the provision of credit that will help farmers acquire ploughing oxen and other inputs" (156). This is where the role of government in helping rural agrarian communities is highlighted. "In this study we argue and show that investment in rural infrastructure, social services, agricultural extension, and institutional improvement contribute to increased agricultural output, and increased efficiency, which helps ameliorate rural poverty" (155).

All the positions outlined above have as their stated goals poverty alleviation and food security for Ethiopia, though the means to achieve these ends stand diametrically opposed. At the center of contention are the rural communities and the EOTC. The subsistence farming and traditional communitarianism is seen as part of the problem for those who want to modernize agriculture through the creation of a cash economy, foreign investment, and resettlement programs for the displaced peasantry – actions that have drawn the criticism of human rights groups. However, there are others who argue that the national goal of achieving food security must be accomplished through improvements to rural subsistence farming – a proposal that relies on the communitarianism of the rural communities. For this to happen, financing subsidies and technological grants need to be offered to the rural communities without creating a debt-burden for farmers who largely exist outside the cash economy.

Creating the agricultural resilience within those communities most vulnerable to drought more than justifies the infrastructure expenditure. It would also relieve Ethiopia of the burden of seeking international aid, and having to be beholden to donor nations, by helping to prevent famines. An additional incentive for this proposed policy reform comes from the opportunity to preserve the traditional culture of these rural communities.

Here the research on the causes of famine, both historical and present day, by Amartya Sen must be considered. His findings contradict the assumption that famines are caused by a shortage of food. In fact, famines often occur when food is abundant, and the nation is a net food exporter. For example, the Bangladesh famine of 1974 "occurred in a year of greater food availability per head than in any other year between 1971 and 1976" (1999: 165, emphasis in original). Famines, Sen also found, can also occur "without any decline in food output" by the nation (1999: 167). Instead, the cause of every historical famine has always been the same: the poor cannot afford to buy the available surpluses. Even during the Great Irish Famine of the 1840s, where over one million people died of starvation, Ireland was a net food exporter. There was plenty of food to feed everyone, and Sen remarks: "Certainly food could have moved from Britain to Ireland if the Irish could have afforded to purchase it" (1999: 171, emphasis added). Poverty, then, is the true cause of famine, not drought. Yet this cannot be seen as an argument for the forcible implementation of a cash economy and capitalistic production with respect to the rural subsistence farmers of Ethiopia. Rather, Sen finds that, "even when food supply falls sharply in a country or a region, everyone can be saved from starvation by a better sharing of the available food . . . simply through a more equal sharing of the reduced domestic supply of food" (1999: 161). This is exactly the kind of communitarian ethic promoted by the EOTC.

Sen examined the case of famine in 1973 for northern Ethiopia, where drought resulted in widespread dislocations of rural peasantry, particularly impacting the Wollo region. However, Sen notes that "despite the disastrous failure of food output, food prices did not go up very much and for long in Wollo" (1981; 94-95). Moreover, he notes that wholesale food prices in the main market town of Dessie actually went down as a market response (1981: 95-96). Governmental intervention was therefore required to prevent starvation. Again, the point to be taken is that food was readily available, yet the dislocated peasantry could not afford to purchase it. Accordingly, Sen outlines famine prevention policy in the form of emergency public employment for those who cannot afford to purchase the available surpluses. "Compensatory government expenditure in creating employment can help to avert a threatening famine very effectively. Indeed, this is the way potential famines have been prevented from occurring in India since independence [from England in 1947]" (1999: 169). Such measures, he insists, can be employed even in the poorest of developing nations, where the necessary expenditures "do not have to be very large provided that the preventative measures are efficiently organized" (1999: 169). With respect to Ethiopia, the famine preventative employment expenditures could be directed toward the irrigation and agricultural infrastructure improvements mentioned earlier, which would also bolster food security with respect to immediate needs and provide better resilience for the future. This brings us to one last point of consideration.

"We are not poor!" became the counter-narrative in 2009 of international aid recipients in parts of Ethiopia, Kenya, Eritrea, Somaliland, and Somalia – a region known as the Horn

of Africa Pastoral Network. As documented by Scott-Villiers, the pastoralists who needed aid began to resent being labelled as "poor" by the urban elites and the international donor agencies, who only measured their affluence by traditional economic measures of income. As pastoralists, wealth for them was instead measured culturally through social standing and prestige among their peers, and by the size of their herds. By standard economic metrics, yes, they were deeply impoverished with little or no money. Theirs was a barter economy and a subsistence lifestyle where "sharing between richer and poorer pastoralists is central to their self-understanding as a society" (774). Culturally, they saw themselves as equals to the urban elites who looked down on them and their traditions; the fact they needed assistance in times of severe environmental stress did not alter their self-understanding of cultural richness. Scott-Villiers describes it this way: "Counter-discourses in recipient communities often disagree with mainstream understandings of poverty and backwardness and criticise the [lack of] piety, naïveté or arrogance of development officials and relief personnel" (772). Scott-Villiers argues that officials should not disparage these traditional cultures with disempowering narratives and policy objectives that presume aid beneficiaries are impoverished and technologically backwards, but rather the goal should be to find ways to achieve true democracy within a society of groups with unequal political power.

This is the same situation faced by the subsistence farmers in northern Ethiopia, who are sometimes seen as impoverished, ignorant, and primitive by the urban elites. At the heart of this dispute are the church forests, biodiversity hotspots that may have as a little as ten years remaining before the integrity of the forests are compromised by development pressures. The preceding discussion has shown that another path exists to empower these communities without destroying traditional culture. With this in mind, we propose a justification for the traditional ecological management of these forests by the EOTC.

The Stewardship of the EOTC

The attitudes toward the sacred forests held by the typical rural villager, who may have little or no theological education outside church school, derives from a reverential deference to the authority of the monks, nuns, deacons, priests, and bishops who have studied the deep theological traditions of the EOTC. And so, while the laity may not know much about the saints and topics discussed below (that is, outside liturgical observance of commemoration days, discussion in weekly sermons, hymns sung to honor the saints, veneration of icons, and the like), the ecclesial hierarchy of the EOTC most certainly does know this history. It is their sacred duty to preserve this theological tradition from all threats for the faithful, such as apostasy and any heretical views arising from misunderstanding what makes the EOTC

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⁷It is also possible that cultural attitudes toward nature draw inspiration from older, pre-Christian belief systems. For example, the traditional religion of the Oromo people (*Boorana*) holds the natural world as an epiphany of the divine. Ritler, in remarking on a travel report of a European from 1927 which marveled at the beauty of the landscape in the Jemjem region outside Addis Ababa, found that it "refers here to the fact that the Oromo worship all the great 'manifestation' of Nature . . . which explains their respect for, and relative careful treatment of, their natural environment" (2003: 72; see also 1997: 31, 143). That being said, only a few people still practice traditional religion in Ethiopia today; most of the people have since converted to Orthodoxy, Islam, or Protestantism (*Pentay*). For further reading on traditional Oromo attitudes toward nature, see Ta'a.

distinctive when compared to the Catholic and Eastern Orthodox traditions. It is this deeply held reverential attitude of the monastics and ordained priesthood toward their own faith that inspires the faithful in all matters of their lives, including with respect to the special place of the sacred forests in their rural communities. This is how the EOTC's eco-theology has been and continues being taught to the laity in Ethiopia today.

With this in mind, the reader is invited to explore this deep theological tradition in the discussion provided below. It is an eco-theology that draws its strength from a foundation set upon three cornerstones: the EOTC's distinctive Incarnational theology, its covenant typology, and Eucharistic communitarianism. Together, it has served to conserve, not only the church forests, but also the traditional Ethiopian culture of the rural communities that coexist with these lands. To describe this eco-theology for the reader, some background is required first.

Incarnational Theology

The EOTC, together with the Syriac Orthodox Church of Antioch, the Coptic Orthodox Church of Alexandria, the Armenian Apostolic Church, the Eritrean Orthodox Church, and the Malankara Orthodox (Indian) Church, comprise what is commonly known as the Oriental Orthodox Christians. In terms of theological tradition, these churches share the first three ecumenical councils with the Eastern Orthodox and Catholic Christians. However, disputes over the Incarnation of Christ caused, in large part, the Oriental Orthodox to form their own confession of faith. It all has to do with what may seem exceedingly esoteric theological questions about whether Jesus of Nazareth, as God incarnate, remained in any way human – and if so, how did the two natures, human and divine, come to coexist in him? These questions are, however, central to the eco-theology and identity of the EOTC.

The Christological questions would be addressed at the Council of Chalcedon in 451 CE, but the theological solution offered by the Council alienated the Oriental Orthodox, resulting in a schism that continues to this present day. In brief, the Chalcedonian Creed, as it is called, proclaims with respect to the Incarnation that:

Christ, Son, Lord, only begotten, [is] to be acknowledged in two natures, inconfusedly, unchangeably, indivisibly, inseparably; the distinction of natures being by no means taken away by the union, but rather the property of each nature being preserved, and concurring in one Person and one Subsistence, not parted or divided into two persons, but one and the same Son, and only begotten, God the Word, the Lord Jesus Christ.

⁸ A noteworthy expression of this reverential attitude toward the forests being imparted by the priests to the faithful is through the prayers and blessing with holy water to sanctify the community-built enclosure walls, which are used to protect the forest understory from livestock grazing – celebratory events observed by the authors took place at Debrasena and Gibstawit for their newly built protective walls. It is through direct demonstrations like this to the gathered people, together with the communal singing of liturgical hymns about nature discussed in the following section of this article, that the theological heritage of the saints is transmitted to the people.

This confession of Christ "in two natures" was not acceptable to the Oriental Orthodox, who instead emphasize the unity of natures. It is for this reason they are known as *monophysite* (one nature) or, with the preferred term of self-identification, *miaphysite* (unified nature) Christians – which in the native Amharic language of Ethiopia is Tewahedo (into one nature). The great historical irony and tragedy of this schism is that both sides claimed to be drawing authority from the Christological writings of Cyril of Alexandria (378-444), who died before the Council could be held.

The question facing Cyril was how to navigate a course between two earlier Christological heresies. The first was the heresy of Apollinaris of Laodicea (died 390), who argued that, when it says in the Gospel of John that the Word of God became flesh (John 1:14), the soul of the human being known as Jesus was replaced with the divine Logos that served as the intellect, resulting in a single divine subjectivity. Apollinaris claimed that the Incarnation meant the mind of God within a human body; it is a proposal that would erase any resemblance to humanity other than mere appearance only. The consequence was to remove Jesus as an exemplar for humanity, making a charade of any soteriology. The other heresy came from Nestorius (died 450) who claim that two subjectivities – which is to say, two personalities – existed in the incarnated Christ, the human and God at the same time. The problem here is that there are now two Sons of God, which would contradict Trinitarian theology.

This is what the Council of Chalcedon attempted to redress in the Creed, where it is confessed that the human nature of Jesus was fully preserved in the Incarnation, but that both natures existed in a single subjective subsistence. To do this, the Council adopted four adverbs from the writings of Cyril to describe the kenotic movement of God becoming man: inconfusedly, unchangeably, indivisibly, and inseparably. This formulation, however, failed to overcome the concerns of the Alexandrian bishops. They saw the specter of incipient Nestorianism in the two natures language that appears in the Creed. From the Alexandrian perspective, the Chalcedonian solution failed to capture the emphasis on single subjectivity that Cyril had stressed.

Specifically, in his *First Letter to Succensus*, Cyril writes: "The flesh is flesh and not Godhead, even though it became the flesh of God; and similarly the Word is God and not flesh even if he made the flesh his very own in the [redemptive] economy. Given that we understand this, we do no harm to that concurrence into union when we say that it took place *out of two natures*. After the union has occurred, however, we do not divide the natures from one another, nor do we sever the one and indivisible into two sons, but we say that there is One Son, and as the holy Fathers have stated: One Incarnate Nature of The Word" (§6, emphasis added). The distinction is that Cyril wrote that the Incarnation was "out of" two natures, and not "in" two natures. For the Alexandrians, this minor difference between two Greek prepositions, ἐx (out of) or ἐv (in), had tremendous theological implications; it meant that the Chalcedonian Creed failed to show that the movement of God toward fallen humanity was fully accomplished, leaving an ontological gap between God and humanity. In the words of the great Church Father, Gregory of Nazianzus (reposed 390), who in his *Letter to Cledonius* emphasized: "For

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⁹ Understandably, the Eastern Orthodox and the Catholics, who adhere to the Caledonian Creed, do not see this deficiency with its language.

that which He [Christ] has not assumed He has not healed; but that which is united to His Godhead is also saved." In short, for the Alexandrians, the Chalcedonian Creed was proclaiming that God had failed to save fallen humanity because of a perceived ontological barrier between the creaturely and the divine in the Incarnation, ¹⁰ and so they broke away from the church with a new *miaphysite* confession of faith.

Where this discussion comes to bear on eco-theology is with this central theological concept of God bridging the ontological distance between the uncreated and creaturely through the Incarnation. In simple and familiar terms, it is perhaps the starkest refutation of dualism to be found in Christian theology. There is no separation here between the natural world and the grace of God, and it is this immanence of the divine in, not only baptized humanity, but also the entire world, that forms one foundation for the eco-theology of the EOTC.

Covenantal Typology

It is common for EOTC sermons to be recorded on cassette tapes and circulated among believers in Ethiopia. These sermons were analyzed by Keon-Sang An (2015), whose research highlights the role of covenantal typology in the lives of the faithful. The Ark of the Covenant, which is described in the Book of the Exodus, is of special importance to Ethiopians; it is even said that the Ark itself is kept at the old *Tsion Maryam* (Our Lady Mary of Zion) Cathedral in Axum. In analyzing the sermons, Keon-Sang An begins by noting that the Ark of the Covenant is called *tabot* in Amharic, and *Tehadere* in the liturgical language of Ge'ez, meaning "be present" (162). The Ark thus has come to represent symbolically the presence of God among his chosen people (162, 165; for further discussion, see Hoben 1973: 67f.). In terms of New Testament typology, this biblical "type" of the historical Ark is seen juxtaposed with its "antitype" in the Eucharist, where Christ becomes "present" in the consecrated bread and wine. So too, while the Ark is shown destroying idols in 1 Samuel 5, Christ is seen destroying the power of the devil over death itself through the resurrection (162).

The power of this typology is that, as a symbol, it can be replicated without diminishing its efficacious authority, just as it is in every Eucharist. So too, every EOTC church with its accompanying compound is a *tabot*, which carries this same authority of God's very presence at every church compound (An: 164). One preacher describes the typology in this way:

Moses coming down from Mount Sinai with the Ark is a symbol of Jesus Christ dying on the cross to save us . . . Now look at John 6:54. To have life, it is necessary to eat Jesus' flesh and drink Jesus' blood [through the Eucharist].

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¹⁰ Properly speaking, the monophysite Incarnation opens a way for the faithful to approach God through ritual purity and moral behavior. Barring this, a state of separation still exists between each human being and God. For example, a person is forbidden from taking communion if he or she has not fasted, abstained from sexual immorality, or if they have committed other sins from which they have not confessed and received absolution. This image of "separation yet accessible" is also reflected in the church compound itself, which is set apart from the community yet open to all: penitents must remain outside the chapel, while the pure may enter to receive communion, and only the clergy allowed to enter the inner sanctum (the "holy of holies") where the *tabot* is kept – yet it is from there that Holy Communion is prepared and brought out to the gathered people, allowing for a direct communion with God experienced in the mystery of the sacrament. For a fuller discussion of the mediation of these relationships between the sacred and the profane in Ethiopian practice, see Boylston 2012.

His flesh we eat and his blood we drink requires a throne of residence. You know a king is revealed by sitting on his throne. Similarly therefore, the seat of glorification of Jesus' flesh and blood is the Ark of the Covenant. That is the New Testament purpose of the Ark (An: 166).

What is especially significant with respect to eco-theology is that the transcendent God is given an immanent place on earth at each EOTC compound. "Thus, the church is the location where believers encounter God's presence. This ecclesiology justifies their respect for the physical church building and its compound" (An: 206). This is what gives the church forests their status as holy sites in Ethiopian theology. These are the places where God is immanently present and available for communion with the believers; this is where salvation is to be found, not only for themselves, but for the whole world. It is as another preacher describes, "human salvation is going back to the previous state of human beings in the Garden of Eden" (An: 199). It is a reference to the *apokatastasis* (Acts 3:21), where it is prophesied by Peter that God will restore all things, which includes Eden itself according to the theologian Irenaeus (reposed 202). In this, the church forests are seen by the EOTC as the anticipation of a new eschatological Eden here on earth (Tura et al.).

It is also worth noting that this theology is also reflected in the Ethiopian liturgy where an unequivocal affirmation on the goodness of the natural world is to be found. Specifically, in the Preparatory Service (IV) before the Anaphora, the gathered people confess: "We believe in one God, maker of all creation, Father of our Lord, God, and Saviour Jesus Christ . . . We say further that all the creatures of God are good and there is nothing to be rejected" (Daoud and Hazel: §§ 33, 39). V. C. Samuel (1970), in his commentary on the liturgy, remarks that these words testify to the fact that, "The entire natural realm has been made pure and holy by God." This is in keeping with the pronouncement of Athanasius of Alexandria, who stated that, "for no part of Creation had ever been without Him Who, while ever abiding in union with the Father, yet fills all things that are [through indwelling grace]" (2.8; cf. 7.42). The liturgy represents one of the ways the faithful receive the heritage of the Fathers, but not the only way.

The faithful also know that the forests serve as the final resting place of priests, monks, and nuns who have been buried there over many centuries. In Orthodoxy, holy men and women are considered saints, and their relics are capable of imparting grace to those who venerate them. As such, the forests themselves have come to be seen as a place of communion, and where the "blessings of many saints beneath their roots where their holy flesh rested in peace" can still be enjoyed by the people (Wassie 2002: 41). It is because of all these ways the church forests have come to be seen by the people as sacred and integral to the religious community of the EOTC and the rural communities they serve.

Communitarian Life

What emerges from the available anthropological and material religion literature on the rural communities of the EOTC is a strong, vibrant, and dynamic communitarianism built around traditional village life, being centered around church life in general and the Eucharist in particular. Religious life is expressed and experienced through communal observances of fasts and feasts throughout the liturgical year. There are nine major feasts and six minor feasts that are devoted to Christ; then there are five major and nine minor feasts devoted to the life

and miracles of the Virgin Mary, as well as to the dedication of Marian Sanctuaries. There are also feasts associated with particular saints. Prior to each of these feasts, fasting is required as part of the devotional preparation of each celebrant. In addition, every Wednesday and Friday are days of fasting. The total number of fasting days thus amounts to about 250 a year, of which about 180 are obligatory for all, and the rest are only for priests, monks, nuns, and other special groups. The longest periods of fasting are those of Lent, Advent, and Kweskwam, which marks the exile of the Holy Family in Egypt. The general fast (as opposed to the strict fast before communion) implies one meal a day to be taken either in the evening or after services are finished (around 3 p.m.), with total abstention from meat, animal fats, eggs, and dairy products - partaking instead in cereals and vegetables. This fasting is always a communal activity, with the expectation for all to abstain from food and even water before taking communion. "Often, it will be understood as starting in the night preceding the said day after the normal time for supper is over, at around 10 p.m., and as running until the following night, that of the fasting day itself' (Fritsch: 108). With communion occurring around 2 p.m., fasting can therefore last nearly two days. During Lent and especially the Holy Week before Pascha, religious fasting nationwide is so pronounced that even economic activity in the capital of Addis Ababa will slow to a near stop – a fact that draws the ire of commentators like Baye, which was discussed earlier. The feasts that follow are also communal events, with all the wealthier members of the community freely sharing their livestock and agricultural goods for all in displays of magnanimous generosity. All these serve to bring the community together in a tightknit whole, a Eucharistic communitarianism realized throughout village life.

As Tom Boylston documents, whose work is from the perspective of the sociology of food, this material mediation of social and religious relationships through food and fasting, "manipulate[s] the affective and universal properties of food consumption in order to constitute particular kinds of relationships in a Christian idiom: hierarchical and incommensurable relationships with God, relationships of shared belonging and existential commonality with other Christians" (2014: 258). Because of this, the cycle of fasting and feasting "is not incidental but constitutive" of communitarianism in these Ethiopian villages (2014: 259). Boylston also finds that this liturgical cycle "ensures that religious practices and [communitarian] relationships are thoroughly entangled in the material environment and in circuits of production" (2014: 259). Put simply, every aspect of community life in the village, from agricultural enterprise to the festive sharing of the same, takes place within the context of liturgical observances of fasts and feast throughout the year, with the Eucharist as the very foundation of traditional life in Ethiopian Orthodox villages. It is a vibrant and dynamic ecotheology in the lives of the faithful for the EOTC, and it all serves to conserve the church forests and give cooperative resilience in these rural communities.

Conclusions

This then is the eco-theology that preserves the church forests in Ethiopia today. It is a Eucharistic community where the agricultural land resources are communally shared in feasts of *agape*, and where the *ascessis* of self-restraint reigns over the faithful during times of fasting. All this manifests as reverence for the intrinsic goodness of creation, as it is confessed in the liturgy, with the forests in turn venerated as holy places where the invisible saints perform their righteous work as intercessors before God; they are the *tabot*, the Ark of the new covenant

where God is present to the chosen people, and where the people can commune with the divine in the shade of the canopy amidst the ambient sounds of birds, insects, and monkey calls. In short, the forest and the agricultural lands that surround them are an integral part of the religious community of the EOTC, supplying people with its agricultural abundance as it is prayed for in the liturgy, where the gathered petition that "God may grant to the earth her fruit for sowing and for harvest" (Daoud and Hazen: 26; Preparatory Service III §97).

Throughout all, the forest itself is actively managed, responsibly and reverentially by the priests, whose traditional ecological knowledge allows the land to be used sustainably. All of this being realized through Cyril's Incarnational theology, which brings forward Christ's costly kenosis to bridge the separation between the transcendent Good and the immanent fallen, opening a way of virtue back toward God for the faithful. It is as Archbishop Abune Enderyas asserts: "The Church has been keeping the greenery [of the church forests] through her own [devotional] purity" (Butaine and Vander Veer). As the foregoing has sought to show, this is exactly how the EOTC has conserved the dry Afromontane forest remnants throughout the centuries. It is a relationship of interdependence and mutualism through the religious-based traditional ecological knowledge of the EOTC that is sustainably managing these lands and preserving traditional Ethiopian culture.

These same church forests are the future of Ethiopia. They are the hope for the restoration of a denuded landscape from the maldevelopment practices of the past; they are a "Noah's ark" of native biodiversity that someday may inspire new economic pathways such as ecotourism (for bird watchers), refugia for pollinators, a source of wild gene pools of biota, and shade for sustainable coffee crops. If these native species disappear from the Ethiopian landscape, they can never be recovered; it is not only a loss for the local communities but for the entire world. Yet there are those among the agricultural scientists who see the forests as the problem and as a relic of an anti-modern past that threatens Ethiopian food security. It is believed, again by some, that the only way to provide food security is through modernization schemes that extricates the rural communities in re-settlement programs that violate human rights and gives these lands over to foreign interests. While exceptionally lucrative for these foreign investors, there has been little benefit to Ethiopians besides wage labor, which is among the lowest rate in the world. The wellbeing of the people themselves has suffered through these agreements, resulting in a dismal Human Development Index score.

What is needed, therefore, is to get beyond the ideological impasse that separates the agricultural scientists from the conservation biologists – an impasse that has become further entrenched in politics, historical animosities, and foreign development pressures. Both viewpoints share the commonality of seeking a better quality of life for rural Ethiopians. Unfortunately, misconceptions have clouded this hope, particularly those that vilify the people of the EOTC as anti-modern, technologically backwards, and ignorant.

In truth, these rural religious communities are exceedingly rich in traditional culture and in the religious-based traditional ecological knowledge that has sustainably managed these lands with proven success for centuries. It should also go without saying (but for the sake of this discussion here) that the religious history of the EOTC is incommensurable in terms of world history. The EOTC claims the theological heritage of the great Alexandrian theologian Cyril, are the protectors of the Ark of the Covenant, and boast such auspicious figures as the

Ethiopian convert mentioned in the Book of Acts, the Queen of Sheba from the Hebrew Bible, and the great Bishop Frumentius who brought the apostolic tradition of St. Mark to Ethiopia. Ethiopia brings all this together with the richness of Syriac Christianity received through the missionary outreach of the "Nine Saints" in the fifth century, providing a uniquely Tewahedo synthesis that continues to this present day. Of course, this list could go on in a catalogue of saints too numerous to be provided here. All of this is to say that the EOTC should not be looked at with contempt for conserving this celebrated past in their liturgical memory and communitarian lifestyle, but hailed as the protectors of a genetic ark of biodiversity that can reseed the denuded landscapes of the northern highlands, help assure food security, and safeguard ecosystem services for the betterment of all Ethiopians.

Creative solutions are required. One idea is to increase the crop yield in existing agricultural lands through sustainable methodologies, including: irrigation improvements, fertilizer inputs, education of women, and strengthening the community-based water associations. This is the path to true food security. As Amartya Sen has found, the better sharing of available surpluses within a nation will prevent famines. The sharing of resources is already placed centrally within the religious life of people by the EOTC. All they require is investment in their irrigation and agricultural systems in accordance with the recommendations presented herein. This would increase domestic food security while preserving culture and protecting human rights at the same time.

Government, international, and NGO support for conservation efforts should also continue and be furthered wherever possible; the retention of native biodiversity in these church forests is an invaluable global service, providing irreplaceable natural capital for the future of Africa. This can be done for relatively modest expenditure, especially as compared to forest conservation in other countries, and with tremendous returns for all of Ethiopia. For example, a current project that provides funds for stone walls to delineate the church forests, is proving highly successful to ensure the "Noah's ark" concept for biodiversity conservation (Lowman). In addition, there are tracts of church land that were expropriated by the Marxist DERG government which are not suitable for farming or have become degraded. These tracts can be returned to the EOTC for reforestation and the creation of bio-diversity corridors to connect forest fragments; in this, riverine lands should be prioritized. Under the protection of the EOTC, the surrounding agrarian communities would greatly benefit from the irrigation improvements and other ecosystem services such as wind breaks for sedimentation and erosion control of topsoil, and pollinator benefits for the nearby agricultural lands.

It is hoped the new political leadership in Ethiopia will embrace all these proposals and continue to entrust the conservation of the forests to the EOTC. It is a win-win for Ethiopia.

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